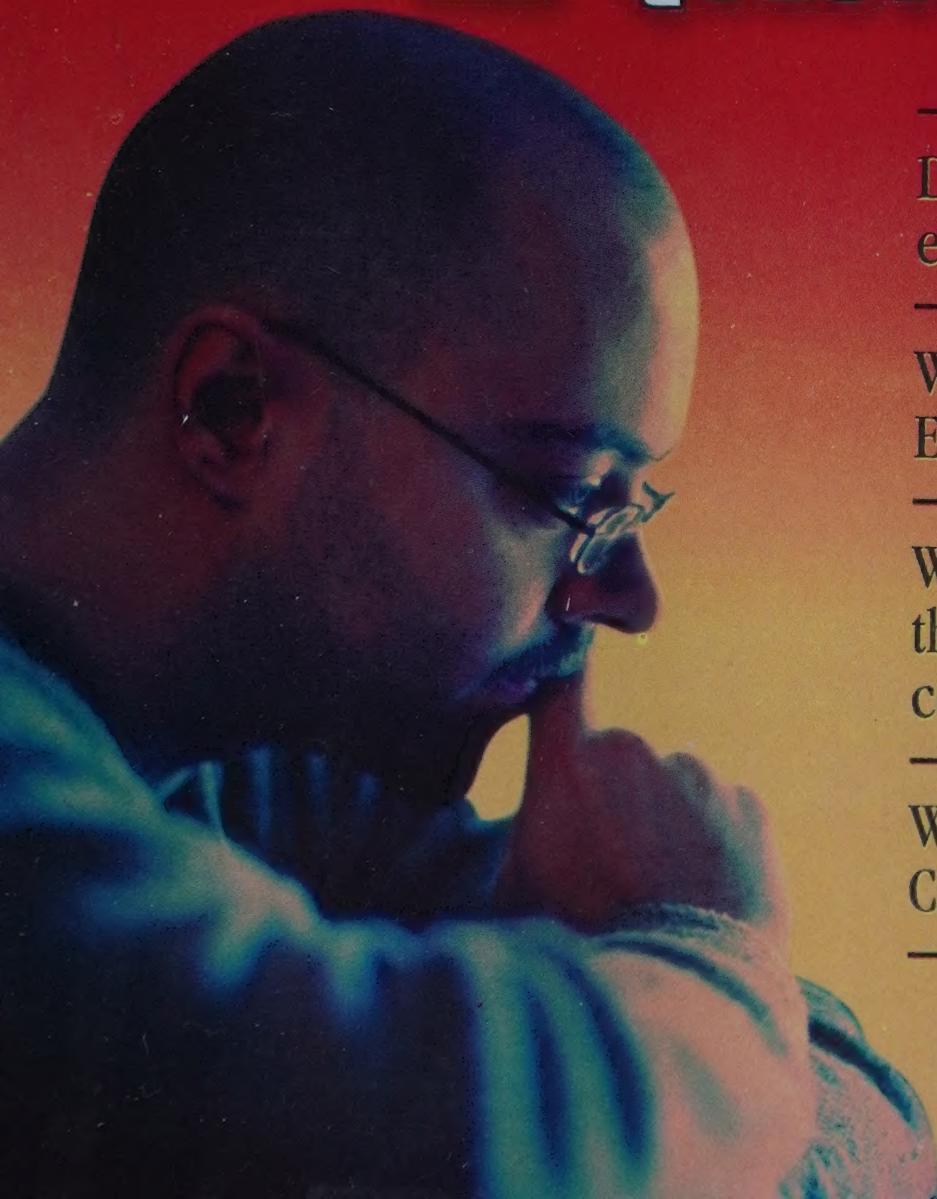


ANSWERS TO THE 4 BIG QUESTIONS!



Does God
exist?

What about
Evolution?

Where did
the 'races'
come from?

Who was
Cain's wife?

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ANSWERS to the 4 Big Questions

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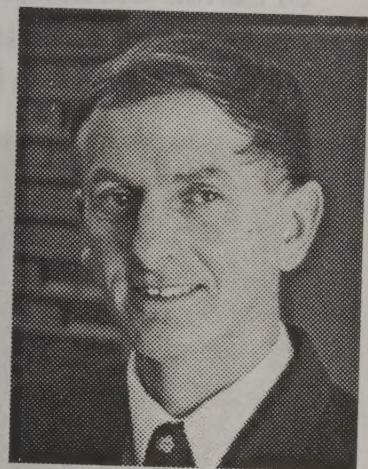
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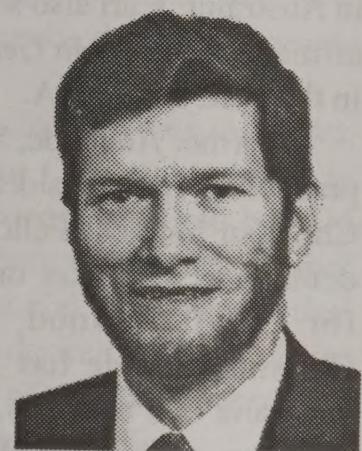
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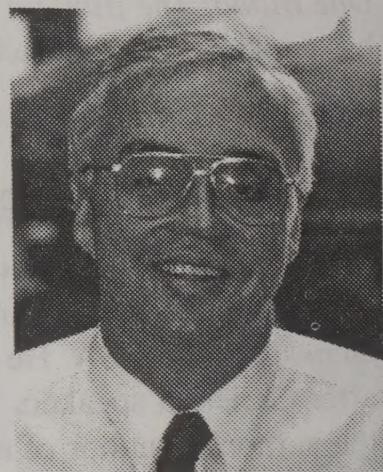
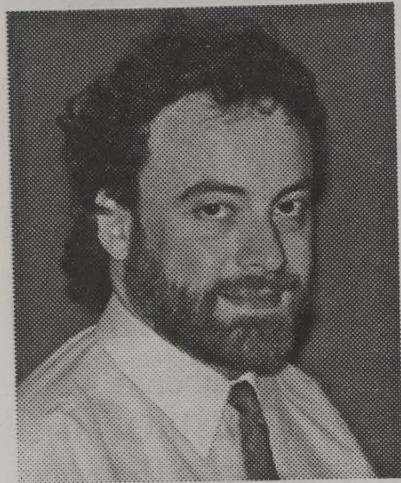
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What's this all about?

Once great nations are in social decline. Family breakdown and crime are increasing. An epidemic of youth suicide afflicts nations where there would seem to be everything to live for. What accounts for this?

This social decay has followed profound changes in what children are taught in school. Depending on the country, several generations have been taught that human life is the result of a giant cosmic accident. According to this teaching, billions of years ago 'nothing' exploded and here we are—people, animals, plants, Earth, the Universe, everything—all having been made by natural processes. This teaching dispenses with any need for a Creator-God who made everything. 'God' is then just an idea dreamed up by people. In this view, people were not made by a Creator and so are not accountable to such a Being for their behaviour.

Many have trouble finding purpose and meaning in life, which is not surprising: this teaching destroys meaning, purpose and morality. How can mere chemicals produce love, purpose, or concepts of right and wrong? Morals become just a matter of opinion, without any objective basis. These disintegrating societies once regarded the Bible as the Word of God and therefore believed that life had purpose because, as the Bible says, God created us—man was made 'in God's image'. Man is not just an evolved animal—people were created to enjoy fellowship with their Creator.

People also believed that morals were absolute (it is always wrong to murder, steal, etc.), because these were commandments from God, the Creator, as recorded in the Bible. They also believed that each person would be held accountable to their Creator for the way they lived—there would be an eternal reckoning. These common beliefs produced stable, peaceful, affluent societies. Even in their declining years, these nations are still the desired destinations for refugees from around the world—such is the legacy of the past generations who believed that God had spoken to mankind through the Bible.

But is the modern view really valid? Many think it is, only because they have not heard anything else. The book you are reading answers some of today's most-asked questions about how we came to exist and the purpose of life. What you read could profoundly affect not only your life now, but also your eternal destiny.

QUESTION 1

But doesn't evolution
explain our existence?

Today, students throughout much of the world are taught that billions of years ago 'nothing' exploded in a 'big bang' and produced everything in the Universe, including you and me—by purely natural processes. In effect, many believe that 'everything made itself'. This is the evolutionary world-view. In this way of thinking, there is no room for a Creator who actually made everything—who owns everything, including us. Concepts of 'God' are just our minds playing tricks on us. Such a view is common among the so-called intelligentsia.

If everything made itself (evolution), and even 'god' evolved, then there is no objective basis for morals. Everyone can do what is 'right in their own eyes'. That is what is happening. People think, more and more, 'We are just animals, so why not behave like animals?' As Dostoyevsky said, 'Without God, everything is permissible; crime is inevitable.'

However, it is logically absurd to believe that 'everything made itself'. This is contrary to all our experience and undermines the principle of cause and effect—the very basis of modern science (see 'The myth of atheism and science', p. 54). Note:

- There are many scientists who do not accept evolution.

Evolution is the creation-myth of the atheist. Many scientists today recognize

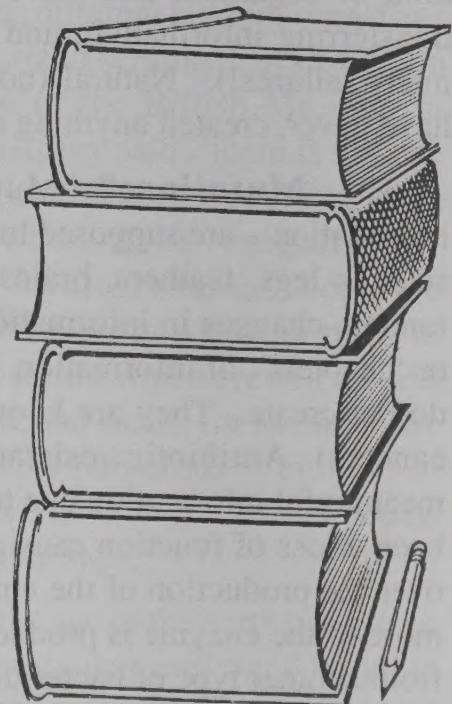
that evolution is impossible (see below). There are estimated to be at least 10,000 practising scientists in the USA alone who reject the evolutionary story entirely and who accept the Bible's account of how we got here.

- Science is ill-equipped to deal with the past.

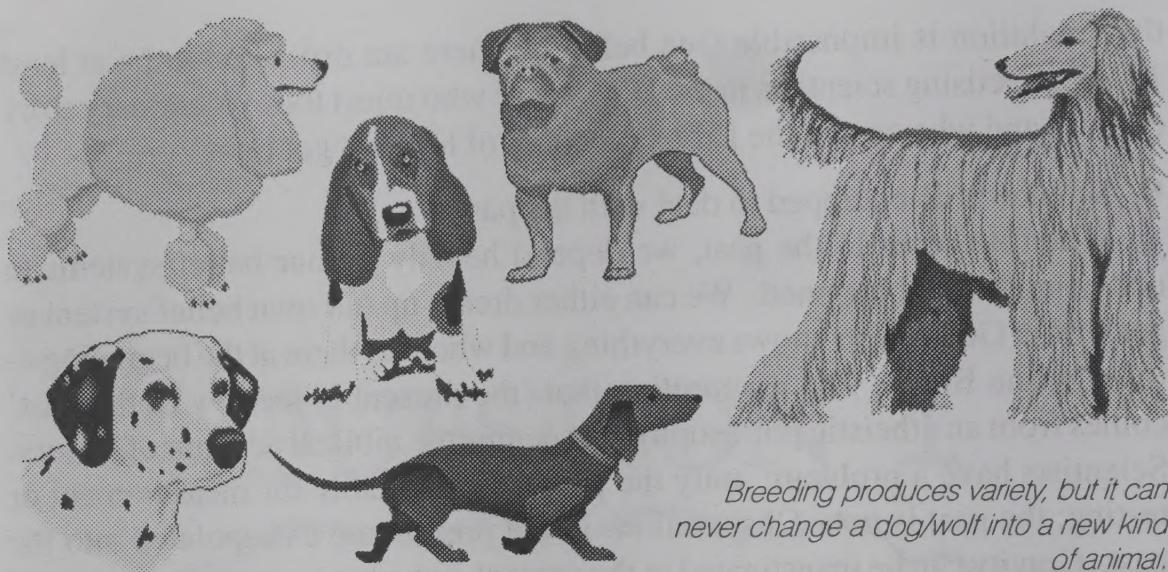
When it comes to the past, we depend heavily on our belief systems to understand what happened. We can either dream up our own belief system or get it from God—who knows everything and who was there at the beginning—through the Bible. The assumption that 'the present is the key to the past' comes from an atheistic philosophy that denies the biblical account of history. Scientists have a problem: only the present is available for measurement or testing; the past is not. Observations in the present are extrapolated into the past. Gravity can be investigated in the present, but what supposedly happened millions of years ago on Earth is not open to experimental proof.

- There is much scientific evidence against the whole idea of molecules-to-man evolution:

1. Information and complexity. Modern knowledge of biochemistry (genes, DNA, proteins, etc.) shows that even so-called 'simple' bacteria are phenomenally complex—far more complex than the most sophisticated machine mankind has ever made—and they can reproduce themselves, some in less than 20 minutes! Such bacterial 'machines' contain the equivalent of about 2 large books of coded information on their DNA. Books don't write themselves and neither could the bacteria make themselves! If a book needs an intelligent creator, the bacterium needs a creator even more so. The source of this information is an insurmountable problem for the origin of life without a creator—and the development of more complex life forms. A human being has about 1,000 books worth of information on the DNA in *each* cell. How do you add 998 books of information to a bacterium to get the information in a human being, as evolutionists claim happened over hundreds of millions of years?



2. Limits to variation. The breeding of animals and plants shows that there are strict limits to how far selection can go—whether it be artificial or natural. Breeding of pigs will never make them fly! Nor can natural selection grow



Breeding produces variety, but it can never change a dog/wolf into a new kind of animal.

feathers on a reptile! Things were created to reproduce true-to-their-kind, just like the Bible says in Genesis chapter 1. The limited amount of natural variation drives modern molecular biologists to try to take genes from one kind of organism and get them to work in another kind. It's all about transferring information, and much intelligence is applied to do this (with many failures!). Natural (non-intelligent) processes cannot, and therefore have never, created anything containing meaningful information.

3. Mutations? Mutations—random changes in the genetic information—are supposed to generate new information so that new features such as legs, feathers, brains, eyes, and so on, could ‘evolve’. However, random changes in information do not create new meaningful ‘paragraphs’, or ‘chapters’, of information. They only corrupt it. Mutations destroy; they do not create. They are known by the diseases they cause in humans (e.g. cancers). Antibiotic resistance in bacteria is not due to an increase in meaningful information due to mutations. In all mutations studied, there has been a loss of function causing the resistance—for example, *loss* of control over the production of the enzyme that breaks down penicillin so that much more of the enzyme is produced. Sometimes information has been acquired from another type of bacterium, which then enables the recipient to resist the antibiotic. Mutations will never produce the new complex information needed for evolution to proceed.¹ Furthermore, research has revealed many examples of features in living things that are made up of highly complex parts where every part has to be present for it to function at all. They cannot be simpler

¹ Spetner, L. 1998. *Not by Chance*. Judaica Press, NY.

² Behe, M., 1996. *Darwin's Black Box*. The Free Press, NY.

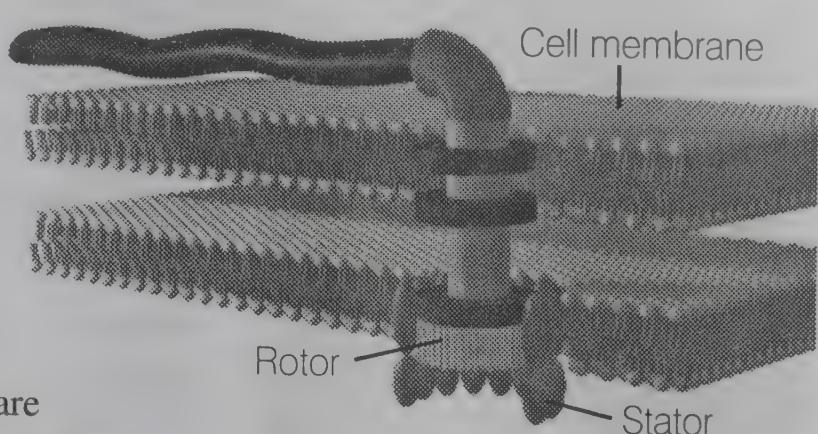
and still function.² It is not possible for small step-wise mutations and natural selection to create such systems because a series of functional intermediates is impossible. Examples are the bacterial flagellum, the blood clotting system, the ATPase 'motor', the signalling system in cells, the DNA-coded protein synthesis system, etc.

4. **Fossils.** The fossils do not show that one kind of organism has changed into another. There should be millions of intermediate types of fossils showing the transitions, if evolution had occurred. There are a handful of disputed ones. Claimed evidence of fossils linking different kinds of organisms

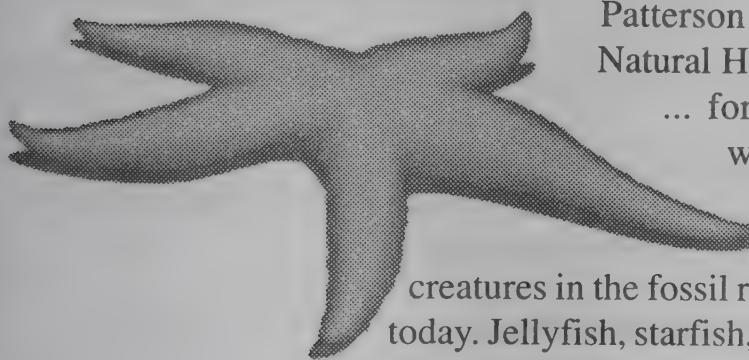
does not stand scrutiny.³ As Dr Colin Patterson of the British Museum of Natural History said, 'there is not one ... for which you could make a water-tight argument.'⁴

Furthermore, there are many hundreds of types of creatures in the fossil record which are still present today. Jellyfish, starfish, and snails, for example, are present in rocks supposedly hundreds of millions of years old and yet they are very like the ones we have in the oceans today. Things breed 'true to their kind' just like the Bible says.

5. **The age of the earth.** The story about the age of the earth has grown in the telling. However, fossils commonly show evidence of rapid burial in water-carried mud—as in a great Flood. Consequently, the rock layers containing these fossils were not laid down slowly and gradually—so fossils do not give support to the millions of years so widely taught today.



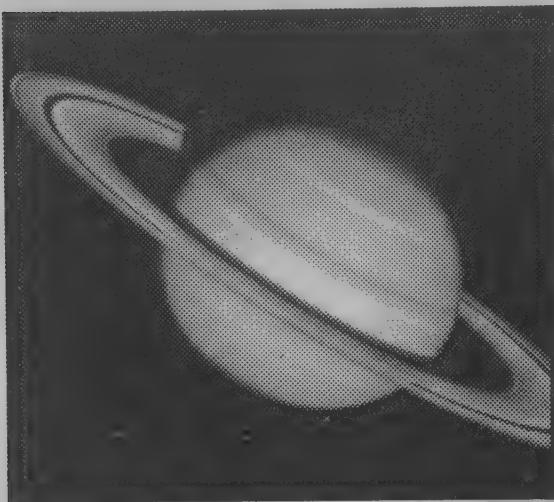
The bacterial flagellum—a rotary motor could not have arisen by small step-wise changes.



3 Gish, D.T., 1995. *Evolution: The Fossils Still Say No!* Institute for Creation Research, San Diego, CA, USA.

4 Letter from Dr Colin Patterson, then senior Palaeontologist at the British Museum of Natural History in London, to Luther D. Sunderland. See Sunderland, L.D., 1984. *Darwin's Enigma*, Master Books, Green Forest, AR, USA.

The Bible tells of a great global Flood, and people groups around the world have their own stories of such a Flood. A global Flood would have created vast amounts of water-carried sand, silt and clay, burying plants and animals and creating layers of rock containing fossils—and all very quickly.



Jupiter's rings—evidence against an old age.

Furthermore, there are many different evidences against a vast age for the Universe. For example, the rate of erosion of the earth's continents, the decay of the earth's magnetic field, the lack of helium in the atmosphere, the number of people on earth, the brevity of recorded history, the persistence of spiral galaxies, the low number of type-II supernovas and lack of type-III supernovas in our galaxy, the existence of short-period comets, and much more.

Well, then, someone may wonder, why do so many apparently well-

educated people believe in evolution? People may believe in evolution and dismiss creation because:

1. They are ignorant of the facts, only ever having heard the case for evolution. There are many like this.
2. They deliberately choose to deny the rightful place of God in their lives. God has told us that none of us has any excuse, because the evidence is right under our noses, so to speak (Romans 1).

Similarities?

We are similar in many respects to animals, especially the apes, and evolutionists argue that therefore we are related to them and so must have a common ancestor with them.

The Bible says in Genesis 1 that God made mankind, a man and a woman, specially:

And God said, Let us make man in our image, in our likeness: and let them rule over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps on the earth. (Genesis 1:26)

God created mankind in *His* image, not in the image of animals. This means that, like God, people would be capable of such things as altruistic love, moral judgment and spiritual perception. Also, man was to rule over the animals.

In Genesis 2, we are given more details of the creation process and we find that Adam was created from *the dust of the ground* (Genesis 2:7). When God pronounced judgment on Adam, He affirmed that Adam came from the ground:

By the sweat of your face you shall eat food until you return to the ground, for out of it you were taken. For dust you are, and to dust you shall return. (Genesis 3:19)

Some wish to allegorize the Genesis account of man's creation to make it conform to the current fashion that man evolved from the apes. The Bible counters them right here: if the dust Adam was made from represents the ape that he evolved from, then Adam must have turned back into an ape because of his sin! Of course not—the Bible is clear that man is a special creation.

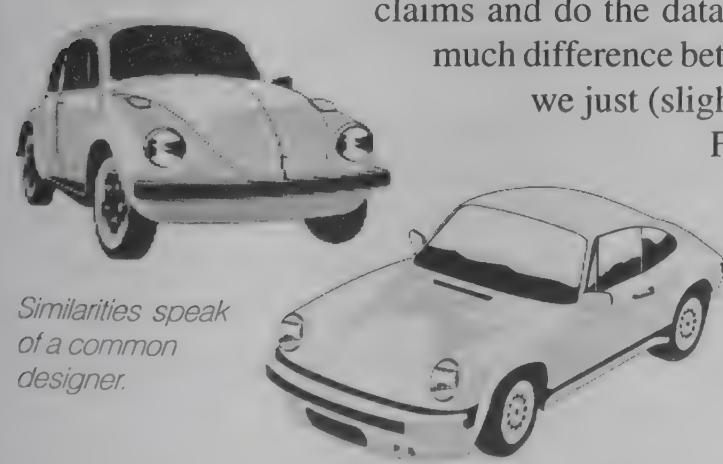
Indeed, various kinds of animals and plants were also created individually, not just humans. They were to produce seed '*after their kind*' (Genesis 1:11, 12 cf. 21, 24, 25), meaning that bean plants were to produce bean seeds, cattle would give birth to cattle, etc. So there is no hint in Scripture of an evolutionary process where one kind of organism would change into a basically different kind.

Evolutionists believe not only that mankind evolved from an ape-like creature, but that ultimately everything evolved from a single-celled organism which happened to arise from non-living matter. They claim that the similarities between living things prove that they evolved from one another. They cite such things as the similarity in human and chimp DNA, supposed similarities between embryos, vestigial organs, and fossils claimed to be transitional between different kinds—such as supposed ape-men. Let us examine some of these claims.

Human/chimp DNA similarity

The idea that human beings and chimps have close to 100% similarity in their DNA is often asserted. The figures quoted vary: 97%, 98%, or even 99% similarity, depending on who is spinning the story. What is the basis for these claims and do the data mean that there really is not much difference between chimps and people? Are we just (slightly) evolved apes?

Firstly, similarity is not evidence for common ancestry (evolution), but rather for a common designer (creation). Think about a Porsche and the genuine Volkswagen 'Beetle' car. They both have



air-cooled, flat, horizon-tally-opposed, 4-cylinder engines in the rear, independent rear suspension, two doors, boot (trunk) in the front, and many other similarities ('homologies'). Why do these two very different cars have so many similarities? Because they had the same designer! Whether similarity is morphological (shape, form) or biochemical, it is not an argument for evolution, over creation.

If humans were entirely different to all other living things, or indeed every living thing was entirely different, would this reveal the Creator to us? No! We could think that there must be many creators rather than one. The unity of the creation is testimony to the *One* True God who made it all (Romans 1:20).

If humans were entirely different to all other living things, then how could we live? We have to eat other organisms to gain nutrients and energy to live. How could we digest them and how could we use the amino acids, sugars, etc., if they were different to the ones we have in our bodies? Biochemical similarity is necessary for us to have food!

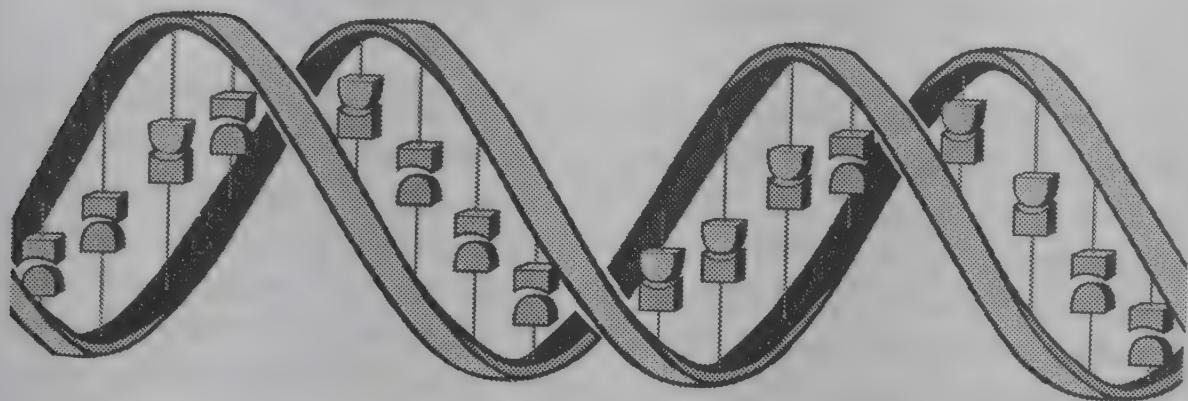
DNA in cells contains much of the information necessary for the development of an organism. So, if two organisms look similar, we expect there to be similarities also in their DNA. The DNA of a cow and a whale, two mammals, should be more alike than the DNA of a cow and a worm. If it were not so, then the idea of DNA being the information carrier in living things would have to be questioned.

Humans and apes are quite similar in appearance, so we would expect there would be similarities in their DNA. Of all the animals, chimps are most like humans, so we would expect that their DNA would be most like human DNA.

Certain biochemical capacities are common to all living things, so there is even a degree of similarity between the DNA of yeast, for example, and that of human beings. Because human cells can do many of the things that yeast can do, we share similarities in the DNA sequences that code for the enzymes and proteins that do the same jobs in both types of cells. Some of the sequences, for example those that code for the proteins involved in chromosome structure, are almost identical.

What of the 97% similarity claimed between humans and chimps? The figures published do not mean quite what popular publications, and even some science journals, claim. DNA carries its information in the sequence of four chemical compounds known as nucleotides, abbreviated C,G,A,T. Groups of three at a time of these chemical 'letters' are 'read' by complex translation machinery in the cell to determine the sequence of amino acids, of which there

⁵ This would take a lot of computer time—imagine comparing two sets of 1,000 large books, sentence by sentence, for similarities and differences!



are 20 different types, to be incorporated into proteins. The human DNA has 3 billion nucleotides. The human and chimp DNA sequences have not both been fully sequenced so that a proper comparison can be made.⁵ Indeed it may be a while before such a comparison can be made because while we may have the full sequence of human DNA, chimp DNA has a much lower priority.

Where did the 97% similarity come from then? It was inferred from a fairly crude technique called DNA hybridization.⁶ However, there are various reasons DNA does or does not hybridize, only one of which is degree of similarity. Consequently, those working in the field of molecular homology do not use this somewhat arbitrary figure; other figures derived from the shape of the 'melting curve' are used instead.⁷

The original papers did not contain the basic data and the reader had to accept the interpretation of the data 'on faith'. Sarich and co-workers⁷ obtained the data and discovered considerable sloppiness in the generation of the data as well as in the statistical analysis.⁸ Even if everything else were above criticism, the 97% figure came from making a basic statistical error—averaging two figures without taking into account differences in the number of observations contributing to each figure. When a proper (weighted) mean is calculated it is 96%, not 97%. However, the work lacked true replication, so no real meaning can be attached to the figures.

⁶ Sibley and Ahlquist, 1987. *Journal of Molecular Evolution* 26:99–121.

⁷ Sarich, V.M., Schmid, C.W., and Marks, J., 1989. *Cladistics* 5:3–32.

⁸ Molecular homology studies could be quite useful to creationists in determining what were the original created 'kinds' and what has happened since to generate new species within each kind. For example, the varieties/species of finch on the Galápagos Islands obviously derived from an original small number that made it to the islands. Recombination of the genes in the original migrants and natural selection could account for the varieties of finch on the islands today—just as all the breeds of dogs in the world today were artificially bred from the original wild dog kind not long ago. The molecular homology studies have been most consistent when applied within what are probably biblical kinds. However, the results contradict the major predictions of evolution regarding the relationships between the major groups such as phyla and classes (see ref. 9 regarding the latter).

Answers to the 4 Big Questions

What if human and chimp DNA were 97% homologous? What would that mean? Would it mean that humans could have ‘evolved’ from a common ancestor with chimps? Not at all! As the amount of information in the 3 billion base pairs in the DNA in every human cell has been estimated to be equivalent to that in 1,000 books of 500 pages each,⁹ if humans were ‘only’ 3% different this still amounts to 90 million base pairs, equivalent to about 30 large books of information. This is an impossible barrier for mutations (random changes) to cross, even given the several million years widely claimed as the time available for this to happen.

Does a high degree of similarity mean that two DNA sequences have the same meaning or function? No, not necessarily. Compare the following sentences:

There are many scientists today who question the evolutionary paradigm and its atheistic philosophical implications.

There are **not** many scientists today who question the evolutionary paradigm and its atheistic philosophical implications.

These sentences have 97% homology and yet have almost opposite meanings! There is a strong analogy here to the way in which large DNA sequences can be turned on or off by relatively small control sequences.

Even if we accept the data as legitimate, there is no way that mutations could bridge the gap between chimps and humans. Chimps are just animals. We are made in the image of God (no chimps will be reading this, or discussing it with one another).

Similarities between embryos

Many people have heard that the human embryo goes through evolutionary stages, such as having gill slits like a fish, a tail like a monkey, etc., during its early development in the womb.

This concept was pretentiously called the ‘biogenetic law’, which the German evolutionist Ernst Haeckel popularized in the late 1860s. It is also known as ‘embryonic recapitulation’ or ‘ontogeny recapitulates phylogeny’, meaning that during an organism’s development it supposedly re-traces its evolutionary history, so that a human embryo is supposed to pass through a fish stage, an amphibian stage, a reptile stage, and so on.

Within months of the popular publication of Haeckel’s work in 1868, the professor of zoology and comparative anatomy at the University of Basel showed it to be fraudulent. The professor of anatomy at the University of

⁹ Denton, M., 1985, *Evolution: Theory in Crisis*, Burnett Books.

Question 1—But doesn't evolution explain our existence?

Leipzig, a famous comparative embryologist, corroborated these criticisms.¹⁰ These scientists showed that Haeckel fraudulently modified his drawings of embryos to make them look more alike. Haeckel even printed the same woodcut several times, making the embryos look absolutely identical, and then claimed they were embryos of different species! Despite this exposure, Haeckel's woodcuts appeared in textbooks for many years.

Has the 'biogenetic law' any merit? In 1965, evolutionist G.G. Simpson said, 'It is now firmly established that ontogeny does not repeat phylogeny.'¹¹ Professor Keith Thompson (biology, Yale) said,¹²

'Surely the biogenetic law is as dead as a doornail. It was finally exorcised from biology textbooks in the fifties. As a topic of serious theoretical inquiry, it was extinct in the twenties.'

However, even a textbook used in the 1990s in biology courses in many universities still taught Haeckel's false ideas:¹³

'In many cases the evolutionary history of an organism can be seen to unfold during its development, with the embryo exhibiting characteristics of the embryos of its ancestors. For example, early in their development, human embryos possess gill slits like a fish ...'

Despite the fraudulent basis of the idea and its debunking, even by many high-profile evolutionists, the idea persists.

Scientists who should have known better have promoted the myth of embryonic recapitulation in the 1990s. For example, science popularizer, the late Carl Sagan, in a popular article titled 'Is it possible to be pro-life and pro-choice?'¹⁴, described the development of the human embryo as follows:

'By the third week...it looks a little like a segmented worm. ... By the end of the fourth week, ... something like the gill-arches of a fish or an amphibian have become conspicuous ... It looks something like a newt or a tadpole. ... By the sixth week ... reptilian face ... By the end of the seventh week ... the face is mammalian, but somewhat pig-like. ... By the end of the eighth week, the face resembles a primate, but is still not quite human.'

This is straight from Haeckel and it is nonsense! A human embryo never looks reptilian or pig-like. A human embryo is always a human embryo,

¹⁰ Rusch, W.H. Sr, 1969. *Creation Research Society Quarterly* **6**(1):27–34.

¹¹ Simpson and Beck, 1965. *An Introduction to Biology*, p.241.

¹² Thompson, K., 1988. *American Scientist* **76**:273.

¹³ Raven, P.H. and Johnson, G.B., 1992. *Biology (3rd edition)*, Mosby–Year Book, p.396.

¹⁴ Parade Magazine, 22 April, 1990.

from the moment of conception; it is never anything else, contrary to what Sagan said! It does not **become** human sometime after 8 weeks. This is just what the Bible says—the unborn baby is a tiny human child (Genesis 25:21–22, Psalm 139:13–16, Jeremiah 1:5, Luke 1:41–44), so abortion is murder.

Gill slits—something fishy?

The university textbook referred to above (footnote 13) claims that ‘human embryos possess gill slits like a fish’, although it has been known for many decades that humans embryos *never* have ‘gill slits’. These ‘pharyngeal arches’, as they are properly known, or ‘throat pouches’, never have a breathing function, are never ‘slits’ or openings, and develop into the thymus gland, parathyroid glands and middle ear canals—none of which has anything to do with breathing!

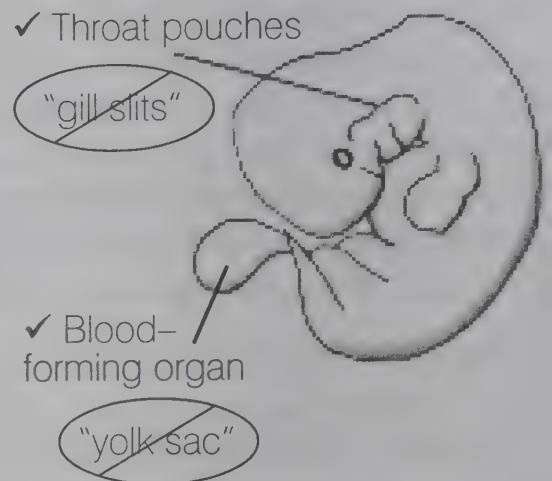
Specialist embryology textbooks acknowledge that human embryos do not have gill slits. For example, Langman said¹⁵

‘Since the human embryo never has gills—branchia—the term pharyngeal arches and clefts has been adopted in this book.’

However, many still speak of ‘gill slits’, especially when teaching students. The term prevails in school and university textbooks, but it is wrong.

More revelations about Haeckel’s fraud!

Popularizers of evolution, when pressed, will admit that human embryos do not have gill slits and that Haeckel’s drawings were somewhat fraudulent, but they still claim that similarities between embryos are evidence for evolution. But this confidence rests on the common belief that Haeckel’s drawings resemble reality.¹⁶



Wrong terms are used to label human embryos, indoctrinating students in evolutionary belief

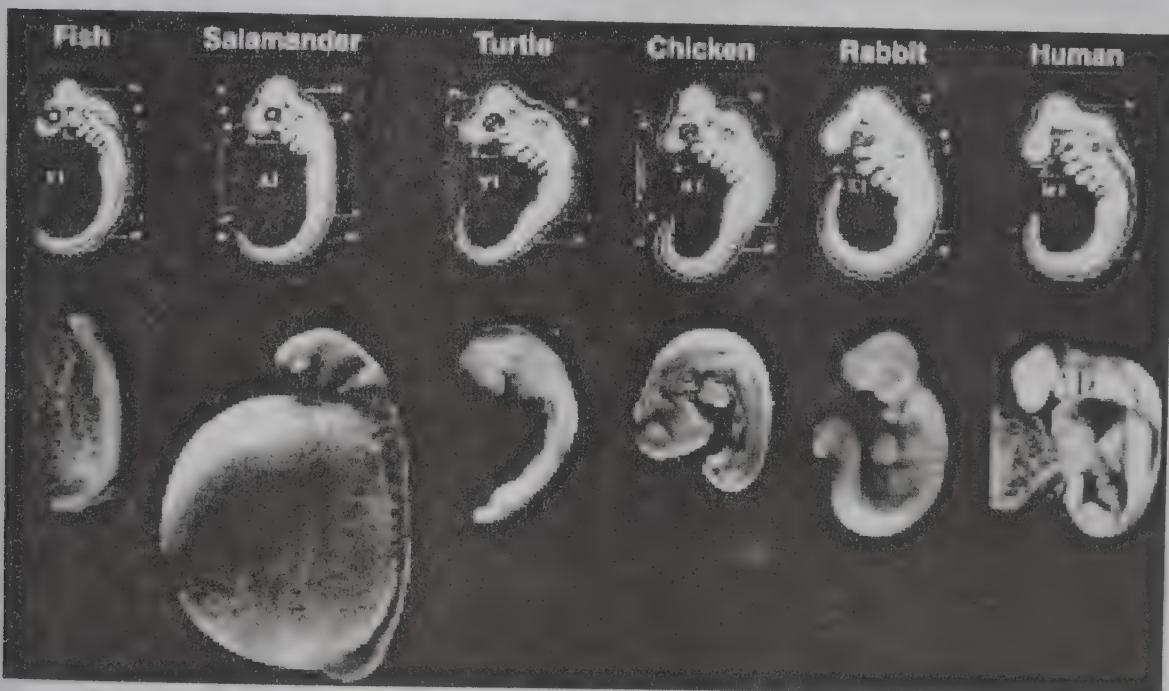
¹⁵ Langman, J., 1975. *Medical Embryology* (3rd edition), p. 262.

¹⁶ For example, Gilbert, S., 1997. *Developmental Biology* (5th edition), Sinauer Associates, Mass., pp. 254, 900. Gilbert wrongly credits the drawings to ‘Romanes, 1901’.

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However, Haeckel's fraud was far worse than anyone realised. Dr Michael Richardson, an embryologist, with the help of biologists around the world, photographed the types of embryos Haeckel supposedly drew.¹⁷ He found that Haeckel's drawings bore little resemblance to real embryos.¹⁸ Haeckel's drawings were no mistake. He deceitfully produced them to promote the public acceptance of evolution. And Haeckel's writings on evolution and eugenics strongly inspired Hitler's horrific 'ethnic cleansing' practices.

Haeckel's drawings should no longer be used to support the evolutionists' claim that embryo similarities support evolution.



Haeckel's fraudulent drawings (top row) and photographs of the actual embryos (bottom row). After Richardson et al.¹⁷ Used with permission. © Springer-Verlag GmbH & Co.

Anomalies point to creation!

If we compare vertebrate embryos at the pharyngula stage (i.e. the stage showing the pharyngeal arches), some can look vaguely similar, but at *earlier* stages they are quite different! Ballard said,¹⁹

‘... from very different eggs the embryos of vertebrates pass through cleavage stages of very different appearance, and then through a period of morphogenetic movements showing patterns of migration and temporary structures unique to each class. All then arrive at a pharyngula stage, which

¹⁷ Richardson, M., et al., 1997. *Anatomy and Embryology* 196(2):91–106.

¹⁸ Grigg, R., 1998. *Creation* 20(2):49–51.

¹⁹ Ballard, W.W., 1976. *Bioscience* 26(1):36–39.

is remarkably uniform throughout the subphylum, consisting of similar organ rudiments similarly arranged (though in some respects deformed in respect to habitat and food supply).’

After ‘converging’ together, the embryos then diverge away from each other. How can this be explained through evolution? ReMine²⁰ argues that it points to an intelligent designer who designed living things. God made things to show that there is *one* creator (similarity at the pharyngula stage), but this similarity cannot be explained as a result of natural processes (evolution) because the earlier stages of embryo development differ greatly. The differences at the earlier stages give no support to a naturalistic explanation for the similarity at the later pharyngeal stage being due to common descent.

Likewise, with the mode of development of amphibian and mammal foot bones in the embryo. They can end up looking very similar, but the amphibian’s toes develop from a bony plate by the dissolving of bone between the toes, whereas the mammal’s toes develop by growth outwards from buds. The different modes of development rule out evolution as an explanation and show that the similarity is due to a common Creator/Designer.

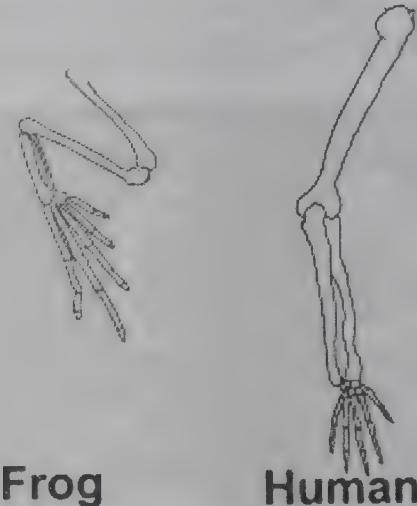
Patterns of embryo development point to creation, not evolution! We are indeed ‘wonderfully made’ (Psalm 139:14).²¹

Vestigial Organs?

Evolutionists often argue that such things as flightless birds’ small wings and the human appendix are ‘leftovers of evolution’ and so evidence for evolution. This ‘vestigial organ’ argument for evolution is an old one, but is not a sound argument for evolution, because:

²⁰ ReMine, W.J., 1993. *The Biotic Message: Evolution versus Message Theory*, *S* Paul Science, p. 370.

²¹ For more information on embryos see Parker, G., 1984. *Creation* 6(3):6–9; Vetter, J., 1991. *Creation* 13(1):16–17; Glover, W. and Ham, K., 1992. *Creation* 14(3):46–49; Grigg, R., 1996. *Creation* 18(2):33–36.



Frog

Human

A frog and a human have very similar limb structures, but the foot/hand arrived at by a different process.

Question 1—But doesn't evolution explain our existence?

First, it is impossible to prove that an organ is useless, because there is always the possibility that a use may be discovered in future. This has happened with more than 100 allegedly useless vestigial organs in humans that are now known to be essential.

Second, even if the alleged vestigial organ were no longer needed, it would prove 'devolution' not evolution. From the Bible we would expect to see deterioration of the originally perfect creation because of the corruption of the whole creation because the people God created rejected their Creator; i.e. sinned (Romans 8:20–22). However particles-to-people evolution needs to find examples of *nascent* organs, i.e. those which are *increasing* in complexity.

Wings on birds that do not fly?

Birds such as ostriches and emus *could* have derived from smaller birds that once could fly. This is possible in a created world. Loss of features is relatively easy by natural processes, whereas acquisition of new characteristics, requiring specific new DNA information, is impossible. Loss of wings has probably been seen in a beetle species that colonized a windy island. Again, this is loss of genetic information, which is not evidence for microbe-to-man evolution, which requires masses of new genetic information.²²

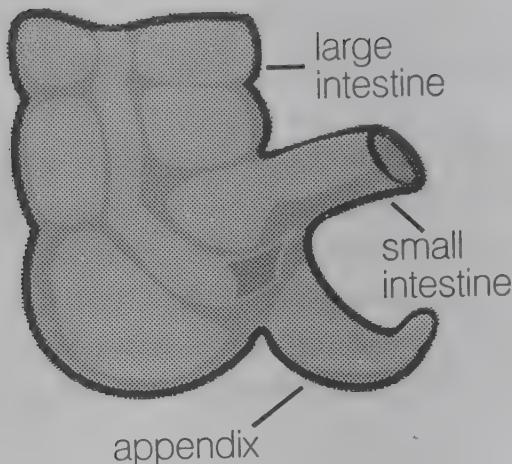


The emu's wings are not useless.

Also, the emu's wings are not functionless. If the wings were useless, why are the muscles functional, allowing these birds to move their wings? Possible functions, depending on the species of flightless bird, include: balance while running, cooling in hot weather, warmth in cold weather, protection of the rib-cage in falls, mating rituals, sheltering of chicks, etc.

²² Wieland, C., 1997. *Creation* 19(3):30.

The human appendix?



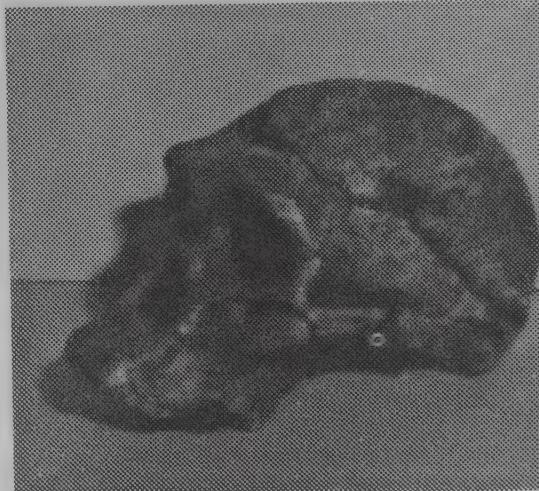
The human appendix helps protect the small intestine from microbes in the large intestine.

The appendix contains lymphatic tissue that polices bacteria entering the intestines. It functions in a similar way to the tonsils at the other end of the alimentary canal, which increase resistance to throat infections, although once also thought to be useless.^{23, 24}

As Scadding, an evolutionist, said,²⁵ ‘...vestigial organs provide no evidence for evolutionary theory’.

Ape-men?

Many have been hoodwinked into believing that the ancestry of mankind has been mapped faithfully and nearly completely. They have heard about ‘missing links’, and regard them as scientific proof of man’s evolution from apes. However, no ape-like ancestor for man has been convincingly documented. The ‘missing links’ are still missing. Here is a summary of facts relating to some of the best known fossils.^{26, 27}



Australopithecus africanus.

²³ Ham, K., and Wieland, C., 1997. *Creation* 20(1):41–43.

²⁴ Glover, J.W., 1988. *CEN Technical Journal* 3:31–38.

²⁵ Scadding, S.R., 1981. *Evolutionary Theory* 5:173–176.

²⁶ For details, see Lubenow, M., 1994, *Bones of Contention: A Creationist Assessment of the Human Fossils*, Baker Books.

²⁷ For a documentary video on so-called ‘ape-men’, see *The Image of God*, Keziah Films (distributed by *Answers in Genesis*).

Defunct ape-men (some)

These are ones once claimed as pre-human intermediates between apes and humans, but have now been discarded as such.

- ***Homo sapiens neanderthalensis*** (Neandertal man)—150 years ago, Neandertal reconstructions were stooped and very much like an 'ape-man'. However, the stooped posture was due to disease (rickets). Neandertals were part of the human kind, fully able to speak, create art and music, have a religious outlook, etc.²⁸
- ***Ramapithecus***—once widely regarded as the ancestor of humans, it has now been realized that it was merely an extinct type of orangutan (an ape).
- ***Eoanthropus*** (Piltdown man)—many were convinced of evolution by this hoax based on a human skullcap and an orangutan's jaw. It was widely publicized as the missing link for 40 years.
- ***Hesperopithecus*** (Nebraska man)—based on a single tooth of a type of pig now living only in Paraguay.
- ***Pithecanthropus*** (Java man)—now renamed *Homo erectus* (see below), and part of the human kind.
- ***Australopithecus africanus***—this was at one time promoted as the missing link. It is very ape-like and evolutionists themselves no longer consider it to be transitional.
- ***Sinanthropus*** (Peking man)—has now been reclassified as *Homo erectus* (see below).

Currently fashionable 'ape-men'

These are the ones that adorn the evolutionary trees of today and which supposedly led to *Homo sapiens* from a chimpanzee-like creature.

- ***Australopithecus***—there are various species of these that have been at times proclaimed as human ancestors. One remains: *Australopithecus afarensis*, popularly known by the fossil 'Lucy'. However, detailed studies of the inner ear, skulls and bones have suggested that 'Lucy' and her like are not on the way to becoming human. For example, they may have walked differently to most apes, but definitely not habitually upright in the human manner. *Australopithecus afarensis* is very similar to the pygmy chimpanzee. In fact, Lucy's wrist-bones were recently found to have the locking mechanism of a knuckle-walking ape.

²⁸ Lubenow, M.L., 1998. *CEN Technical Journal* 12(1):87–97.

- ***Homo habilis***—there is a growing consensus among most palaeoanthropologists that *habilis* actually includes bits and pieces of various other types—such as *Australopithecus* and *Homo erectus*. It is therefore an ‘invalid taxon’. That is, it never existed as such. This has been portrayed as *the* ‘clear link’ between apes and humans, but it was never valid.
- ***Homo erectus***—many remains of this type have been found around the world. This classification now includes Java man (*Pithecanthropus*) and Peking man (*Sinanthropus*), which were once promoted as ‘missing links’. Their skulls have prominent brow ridges, similar to Neandertals’; their bodies are just like those of people today, only more robust. The brain size is within the range of people today and studies of the inner ear have shown that *Homo erectus* walked just like us. Both morphology and archaeo-logical/cultural findings in association suggest that *Homo erectus* was fully human. Some evolutionists are now agreeing that *erectus* should be included in *Homo sapiens*.²⁹



Homo Erectus, a variant of the human kind, was once promoted as ‘the missing link’.

There is no clear fossil evidence that man is the product of evolution. The whole chain of missing links is still missing because they simply never existed. The Bible clearly states, ‘then the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul’ (Genesis 2:7). Considering the history of defunct ‘ape-men’, all future claims should be treated sceptically.

Other transitional fossils

According to the evolutionary story, over eons of time mutations and natural selection created all living things, including bacteria, beetles, mango trees, mice, elephants and people. The change from one kind of organism to another is supposedly preserved in the fossil record. If this were the case, there should be millions of fossils showing the transitions from one kind of organism to

²⁹ Ref. 26, pp. 134–143.

Question 1—But doesn't evolution explain our existence?

another. But there are precious few candidates, and even evolutionists cannot agree on their significance.

The lack of transitional fossils even drove evolutionists to propose a new mode of evolution in the late 1970s so they could go on believing in evolution without transitional fossils.³⁰ This idea—*punctuated equilibrium*—basically says that the evolutionary changes occurred quickly, geologically speaking, in small isolated populations, so that no fossils were preserved to show them.³¹

Conclusion

The supposed evidence for evolution does not withstand critical examination.³² The evidence is better understood in the context of God creating different basic kinds of organisms which were capable of adapting to different environments through the sorting out of the original created genetic information (re-shuffled by sexual reproduction), via natural selection. Mutations have generated some variation, but this involves loss of genetic information, or at best horizontal changes where information is neither lost nor gained.



Contrast between the evolutionary tree (top)—for which evidence is lacking—and the creationist orchard (bottom)—which fits the evidence and is consistent with the Bible.

³⁰ Batten, D., 1994. *CEN Technical Journal* 8(2):131–137.

³¹ For further reading on the supposed evidence for evolution: Sarfati, J., 1999. *Refuting Evolution*. Master Books. For in depth reading see Ref. 20.

³² Spetner, L.M., 1998. *Not by Chance*, Judaica Press, New York.

The probability of mutations making new genetic information is so low that they could not possibly account for the origin of the vast amounts of complex coded information in living things. The evidence truly demands a Creator-God far superior to humankind in intellect, creative capacity, power, knowledge, etc.—the God of the Bible, who calls upon all mankind to turn away from fables about ‘everything making itself’ and give proper honour to the One who made it all.

QUESTION 2

How did different 'races' arise?

According to the Bible, all people today descended from the survivors of a great Flood—Noah's family, who in turn descended from Adam and Eve (Gen. 1–11). There are many stories, from many parts of the world, of a great Flood that only several people survived to repopulate the earth.

But today we have many different groups, often called 'races', with what seem to be greatly differing features. The most obvious of these is skin colour.



Some see this as a reason to doubt the Bible's record of history. They believe that the various groups could have arisen only by evolving separately over tens of thousands of years. However, this does not follow from the evidence.

The Bible tells us how the population that descended from Noah's family had one language and were living together and disobeying God's command to '*fill the earth*' (Genesis 9:1, 11:4). God confused their language, causing a break-up of the population into smaller groups, which scattered over the earth (Gen. 11:8–9). Modern genetics shows how, following such a break-up of a population, variations in skin colour, for example, can develop in only a few generations. And there is good evidence to show that the various groups of people we have today have **not** been separated for huge periods of time.¹

What is a 'race'?

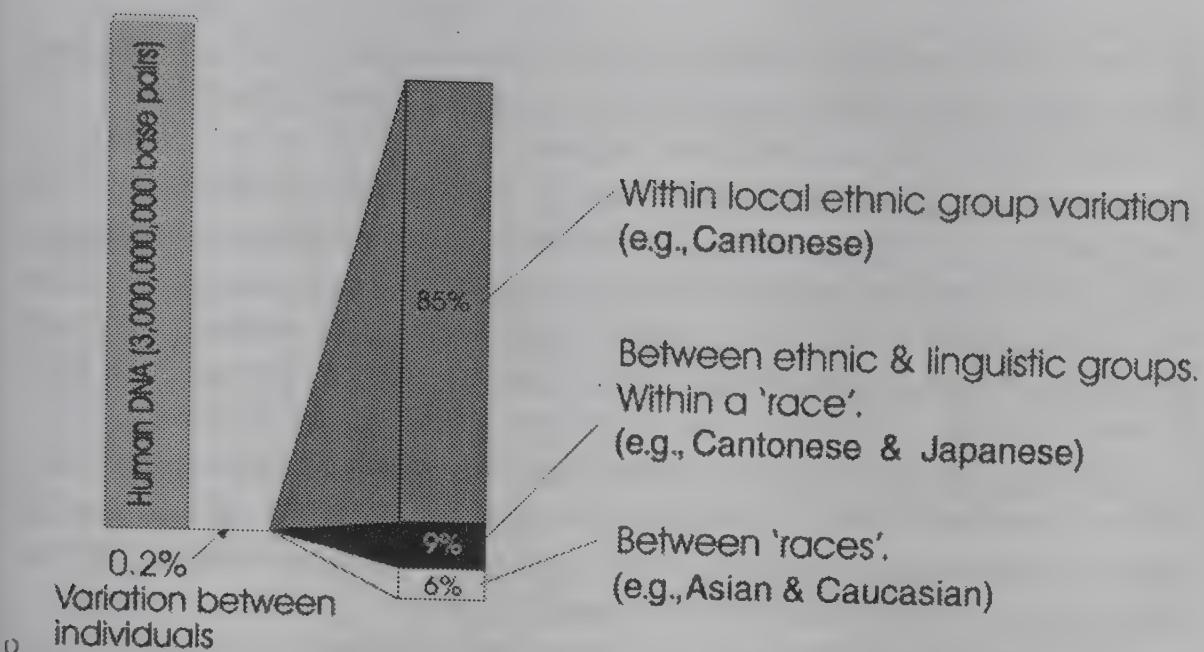
One could say there is really only one race—the human race. The Bible teaches us that God has '*made from one blood all nations of men*' (Acts 17:26). Scripture distinguishes people by tribal or national groupings, not by skin colour or physical features. Clearly, though, there are groups of people who have certain features (e.g. skin colour) in common, which distinguish them from other groups. We prefer to call these 'people groups' rather than 'races', to avoid the evolutionary and racist connotations that have become associated with the word 'race'.

All peoples can intermarry and produce fertile offspring. This shows that the biological differences between the 'races' are not great. In fact, the DNA differences are trivial. The DNA of any two people in the world would typically differ by just 0.2%. Of this, only 6% can be linked to racial categories; the rest is 'within race' variation.²

¹ World-wide variations in mitochondrial DNA (the 'Mitochondrial Eve' story) were said to show that all people today trace back to a single mother (living in a small population) 70,000 to 800,000 years ago. Recent findings on the rate of mitochondrial DNA mutations shorten this period drastically to put it within the biblical time-frame. See Loewe, L., and Scherer, S., 1997. *Trends in Ecology and Evolution* 12(11):422–423; Wieland, C., 1998. *CEN Technical Journal* 12(1):1–3.

² Gutin, J.C., 1994. *Discover*, November, pp. 72–73.

Question 2—How did different 'races' arise?



The sources of variation in DNA between human individuals shows that racial differences are trivial.

'This genetic unity means, for instance, that white Americans, although ostensibly far removed from black Americans in phenotype, can sometimes be better tissue matches for them than *other* black Americans.'²

There is often as much variety within a broadly recognised 'race' as there is between 'races'. For example, people inhabiting the Indian subcontinent are mainly Caucasian ('European') and their skin colour ranges from light brown to quite dark. Even within Europe, skin colour ranges from very pale to brown.

Virtually all evolutionists now agree that the various people groups did not have separate origins, that is in their belief system they did not each evolve from a different group of animals. So they would agree with the creationist that all people groups have come from the same original population. Of course they believe that such groups as the Australian Aborigines and the Chinese have had many tens of thousands of years of separation.

Most people believe that there are such vast differences between groups that there **had** to be many years for these differences to develop somehow. People think this way because they believe that the differences arise from some people having unique features in their hereditary make-up that others lack.

This is not correct. Consider skin colour, for instance. It is easy to think that since people can have 'yellow' skin, 'red' skin, 'black' skin, 'white' skin, and 'brown' skin, there must be many different skin pigments or colourings. And since different pigments would mean a different genetic recipe, or code, in

Answers to the 4 Big Questions

the hereditary blueprint in each people group, it appears to be a problem. How could all those differences develop within a relatively short time?

However, we all have the same pigment in our skin, melanin. This is a dark brownish pigment that we all have in special cells in our skin. If we have **none** (as do albino people, who suffer from an inherited mutation-caused defect, so they lack the ability to produce melanin), then we will have very white or pink skin. If we produce a little melanin, it means that we will be pale in colour. If our skin produces a lot of melanin, we will be a dark brown in colour. In between, of course, are all the shades of brown.

Actually, 'melanin' consists of two pigments, which also account for hair colour. Eumelanin is very dark brown; phaeomelanin is redder³. The important factor in determining skin colour is melanin—the amount produced, and the proportions and distribution of its two components.⁴

This situation is true not only for skin colour. Generally, no people group has any trait that is completely absent from another. For example, the Asian, or almond, eye gets its appearance largely by having an extra amount of fat. Both Asian and Caucasian eyes have fat—the former simply have more of it.

Melanin protects the skin against damage by ultraviolet light from the sun. If you have too little in a very sunny environment, you will easily suffer from



Figure 1.
Caucasian and
Asian eyes differ in
the amount of fat
around
the eye.

³ People tan when sunlight stimulates eumelanin production. Redheads, who are often unable to develop a protective tan, have a high proportion of phaeomelanin. They have probably inherited a defective gene which makes their pigment cells 'unable to respond to normal signals that stimulate eumelanin production' See Cohen, P., 1995. *New Scientist* 147(1997):18.

⁴ Other substances can in minor ways affect skin shading, such as the coloured fibres of the protein elastin and the pigment carotene. However, once again all people share these same compounds, and the principles governing their inheritance are similar to those outlined here for melanin. Other factors in the skin may affect the colour perceived in subtle ways, such as the thickness of the overlying (clear) skin layers, the density and positioning of the blood capillary networks, etc.

sunburn and skin cancer. If you have a great deal of melanin, and you live in a country where there is little sunshine, it is much harder for your body to get enough vitamin D (which needs sunshine for its production in your skin). You may then suffer from vitamin D deficiency, resulting in a bone disease called rickets.

One is not born with a genetically fixed amount of melanin, but rather with a genetically fixed **potential** to produce a certain amount, increasing in response to sunlight. In a Caucasian community, at the beginning of summer people will be more or less the same pale shade, if they spent their winter indoors. As summer goes on, however, some became much darker than others, even if they have had similar exposure to the sun.

From here on, whenever we speak of different colours we are really referring to different amounts of the pigment melanin.

If a person from a very dark people group marries someone from a very pale group, their offspring (called mulattos) are mid-brown. It has long been known that when mulattos marry each other, their offspring may be virtually any 'colour', from very dark to very pale. Understanding this gives us the clues to answer our question, once we deal with some of the basic facts of heredity.

Heredity

Each of us carries information in our body that describes us, like engineers' specifications describe a jumbo jet. It determines that we will be human beings, rather than cabbages or crocodiles, and also whether we will have blue eyes, short nose, long legs, etc. When a sperm fertilizes an egg, **all** the information that specifies how the person will be built (ignoring environmental factors such as exercise and diet) is already present. Most of this information is in coded form in our DNA.⁵ To illustrate coding, a piece of string with beads on it can carry a message in Morse code (see diagram below).

The piece of string, by the use of a simple sequence of short beads, long beads, and spaces (to represent the dots and dashes of Morse code), can carry



⁵ Most of this DNA is in the nucleus of each cell, but some is contained in mitochondria, which are outside the nucleus in the cytoplasm. A sperm contributes nuclear DNA when an egg is fertilized. Mitochondrial DNA comes from the mother, via the egg.

the same information as the English word ‘help’ typed on a sheet of paper. The entire Bible could be written thus in Morse code on a long enough piece of string.

In a similar way, the human blueprint is written in a code (or language convention) which is carried on very long chemical strings called DNA. This is by far the most efficient information storage system known, surpassing any foreseeable computer technology.⁶ This information is copied (and reshuffled) from generation to generation as people reproduce.

The word ‘gene’ refers to a small part of that information that carries the instructions for only one type of enzyme, for example.⁷ A simple way of understanding it is as a small portion of the ‘message string,’ with only one specification on it.

For example, there is a gene that carries the instructions for making α -hemoglobin, one of the proteins involved in carrying oxygen in your red blood cells. If that gene has been damaged by mutation (such as when there is a copying mistake during reproduction), the instructions will be faulty, so it will make a crippled form of α -hemoglobin, if any. (Diseases such as sickle-cell anaemia and thalassaemia result from such mistakes.)

So, with an egg that has just been fertilized—where does all its information, its genes, come from? One half comes from the father (carried in the sperm), and the other half from the mother (carried in the egg). Genes come in pairs, so in the case of hemoglobin, for example, we have two sets of code (instructions) for hemoglobin manufacture, one coming from the mother and one from the father.

This is a very useful arrangement, because if you inherit a damaged gene from one parent that could instruct your cells to produce a defective hemoglobin molecule, you are likely to get a normal one from the other parent which will continue to give the right instructions. Thus only half the hemoglobin in your body will be defective. (In fact, each of us carries hundreds of mistakes, inherited from one or the other of our parents, which are usefully covered up by being matched with a normal gene from the other parent.)

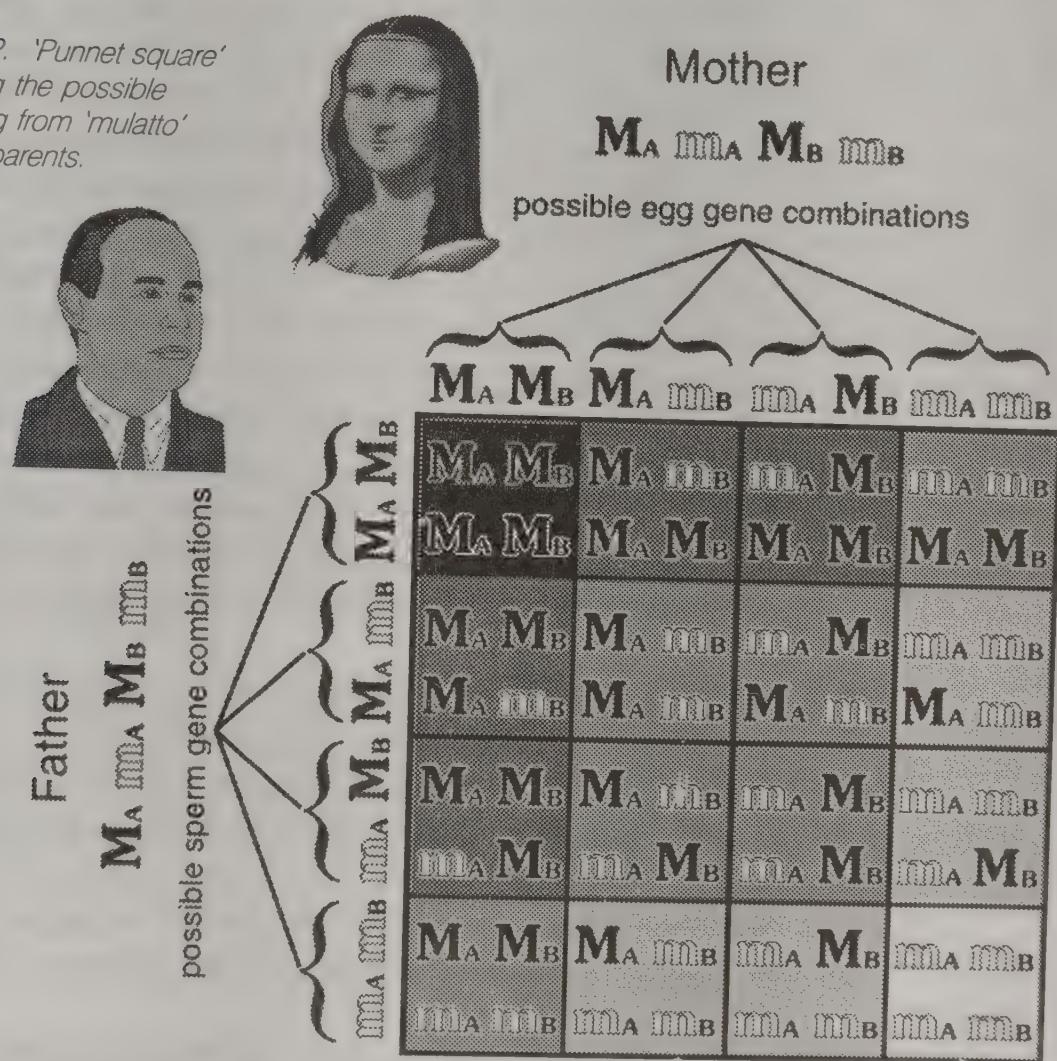
⁶ Gitt, W., 1997. Dazzling design in miniature. *Creation* 20(1):6.

⁷ Incredibly, sometimes the same stretch of DNA can be ‘read’ differently, to have more than one function. The creative intelligence behind such a thing is mind-boggling.

Skin colour

We know that skin colour is governed by more than one pair of genes. For simplicity, let's assume there are only two,⁸ located at positions A and B on the chromosomes. Some gene, 'M', 'says' make melanin; another form of the gene,⁹ 'm', says only make a little melanin. At position A we could have a pair such as $M_A M_A$, $M_A m_A$ or $m_A m_A$,¹⁰ which would instruct the skin cells to make a large amount, moderate, or little melanin, respectively. Similarly, at position B we could have the gene pairs $M_B M_B$, $M_B m_B$ or $m_B m_B$ instructing cells to make a large amount, moderate, or little melanin. So very dark people

Figure 2. 'Punnet square' showing the possible offspring from 'mulatto' brown parents.



⁸ This simplification does not help our case—the more genes there are, the easier it is to have a huge range of 'different' colours. However, the principle involved can be understood from using two as an example.

⁹ A variant form of the same gene is called an 'allele'.

¹⁰ For the technically minded, this type of genetic expression, where both members of the gene pair contribute an effect, is called co-dominance.



could be $M_A M_A M_B M_B$, for example. Since both the sperm and eggs of such people could only be $M_A M_B$ (remember, only one of each A or B pair goes to each sperm or egg), they could **only** produce children with exactly the same combination of genes as themselves. So the children will all be very dark. Likewise, very light people, with $m_A m_A m_B m_B$, could **only** produce children like themselves.

Let's look at what combinations would result from parents who are the type of brown-skinned person called a mulatto, or $M_A m_A M_B m_B$ (the offspring of an $M_A M_A M_B M_B$ and $m_A m_A m_B m_B$ union). We can do this with a diagram called a 'punnet square' (see Figure 2). The left side shows the four different gene combinations possible in the sperm from the father and the top gives the combinations possible in the eggs from the mother. If we locate a particular sperm gene combination and follow the row across to the column below the egg gene combination of interest (like finding a location on a street map), we find the genetic makeup of the offspring from that particular sperm and egg union. For example, an $M_A m_B$ sperm and an $m_A M_B$ egg would produce a child with $M_A m_A M_B m_B$, just the same as the parents. The other possibilities mean that five levels of melanin can result in the different offspring of such a mulatto marriage, as roughly indicated by the level of shading in the diagram.

We find that a range of 'colours', from very light to very dark, can result in **only one generation**, beginning with this particular type of mid-brown parents.

If dark-coloured people with $M_A M_A M_B M_B$, who have no genes for lightness at all, were to intermarry and migrate to a place where their offspring could not marry people of lighter colour, all their descendants will be consistently very dark in colour.

If pale-coloured people with $m_A m_A m_B m_B$, who have no genes for dark skin were to intermarry and migrate to a place where their offspring could not marry darker people, all their descendants would be consistently pale in colour; they would be unable to produce brown-skinned offspring because they lack the genes for extra melanin production.

It is thus easy, beginning with two middle-brown parents, to get not only all the colours, but also whole people groups with permanently different shades of colouring.

But what about people groups that are permanently middle-brown, such as we have today? Again, this is easily explained. Those of $M_A M_A m_B m_B$ or $m_A m_A M_B M_B$, if they no longer intermarry with others, will be able to produce only mid-brown coloured offspring. (You may want to work this out with your own punnet square.)

If these lines were to interbreed again with other such lines, the process would be reversed. In a short time, their descendants would show a whole range of shades of colour, often in the same family. The photo in Figure 3

Question 2—How did different 'races' arise?

shows what were called Britain's amazing twins. One is obviously quite light in colour, the other obviously darker-skinned.

This is not amazing at all when you do the exercise on paper, based on what we have discussed. (A clue if you want to do it yourself: the mother cannot be $M_A M_A M_B M_B$.) Also, the twins are obviously not identical twins, which would be derived from the same embryo (i.e. monozygous) and so would have the same genes and same colour.

If all people on earth were to freely intermarry, and then break into random groups that kept to themselves, a whole new set of combinations could emerge. It may be possible to have almond eyes with black skin, blue eyes with black, frizzy, short hair, etc. We need to remember, of course, that the way in which genes express themselves is turning out to be much more complex than this simplified picture. Sometimes certain genes are linked together. However, the basic point still applies.

Even today, close observation shows that within a particular people group you will often see a feature normally associated with another. For instance, you will occasionally see a European with a broad flat nose, or a Chinese person with very pale skin, or Caucasian eyes. Most biologists now agree that the term 'race' has little or no biological meaning. This also argues strongly against the idea that the people groups have been evolving separately for long periods.

What really happened?

We can now reconstruct the true history of the 'people groups', using:

- The information given by the Creator Himself in the Bible in the book of Genesis.
- The background information given above.
- Some consideration of the effect of the environment.

The first created man, Adam, from whom all other humans are descended, was created with the best possible combination of genes—for skin colour, for example. A long time after Creation, a global Flood destroyed all humans



Figure 3. Britain's 'amazing twins'.

except a man called Noah, his wife, his three sons, and their wives. This Flood greatly changed the environment. Afterwards, God commanded the survivors to multiply and fill the earth (Gen. 9:1). A hundred years later, people chose to disobey God and to remain united in building a great city, with the Tower of Babel as the focal point of rebellious worship.

From Genesis 11, we understand that the people at that time only spoke one language. God judged the people's disobedience by imposing different languages on man, so that they could not work together against God, and so that they were forced to scatter over the earth as God intended.

So all the 'people groups'—Africans, Indo-Europeans, Sino-Asiatics, and others—have come into existence since that time.

Noah and his family were probably mid-brown, with genes for both dark and light skin, because a medium skin colour would seem to be the most generally suitable (dark enough to protect against skin cancer, yet light enough to allow vitamin D production). As all the factors for skin colour were present in Adam and Eve, they would most likely have been mid-brown as well, with brown eyes and brown (or black) hair. In fact, most of the world's population today is still mid-brown.

After the Flood, until Babel, there was only one language and one culture group. Thus, there were no barriers to marriage within this group. This would have tended to keep the skin colour of the population away from the extremes. Very dark and very light skin would have appeared, of course, but people tending in either direction would have been free to marry someone less dark or less light than themselves, ensuring that the average colour stayed roughly the same.

The same would have been true of other characteristics, not just skin colour. Under these sorts of circumstances, distinct differences in appearance will never emerge. This is true for animals as well as human populations, as every biologist knows. To obtain differing separate lines, you need to break a large breeding group into smaller groups and keep them separate, preventing interbreeding.

The effects of Babel

This is what happened at Babel (Genesis 11). Once separate languages were imposed, there were instantaneous barriers. Not only would people have tended not to marry someone they couldn't understand, but entire groups which spoke the same language would have had difficulty relating to and trusting those which did not. They would have tended to have moved away or been forced away from each other into different environments. This, of course, is what God intended—to 'fill the earth'. The emergence of visible differences between the various groups was merely a side effect.

It is unlikely that each small group would have carried the same broad

range of skin colours as the original, larger group. So one group might have had more dark genes, on average, while another might have had more light genes. The same thing would have happened to other characteristics such as nose shape, eye shape, etc. And since they would have intermarried only within their own language group, this tendency would no longer have been averaged out as before.

As these groups migrated away from Babel, they encountered new and different climate zones. This would also have affected the balance of inherited factors in the population. As an example, let us look at people who moved to cold areas with little sunlight. In those areas, the dark-skinned members of any group would not have been able to produce enough vitamin D, and thus would have been less healthy and had fewer children. Recognition of the benefits of lighter skin in this environment could also have lead to an active preference for lighter-skinned marriage partners, thus accelerating genetic change in the population.

So, in time, the light-skinned members would predominate. If several different groups went to such an area, and if one group happened to be carrying few genes for lightness, this particular group could in time die out. This 'natural' selection acts on the characteristics *already present*, and does not evolve new ones.

It is interesting to note that the Neandertals of Europe, an extinct variety of man now recognized as fully human, showed evidence of vitamin D deficiency in their bones. In fact, it was this, plus a large dose of evolutionary prejudice, which helped cause them to be classified as 'ape-men' for a long time. It is thus quite plausible to suggest that they were a dark-skinned people group who were unfit for the environment into which they moved because of the skin colour genes *they began with*. Notice that this natural selection, as it is called, does not *produce* skin colours, but only acts on the created capacity for making skin pigment that is *already there*.

Conversely, fair-skinned people in very sunny regions could easily be affected by skin cancer, in which case dark-skinned people would more readily survive and come to predominate in such areas.

So we see that the pressure of the environment can (a) affect the balance of genes within a group, and (b) even eliminate entire groups. This is why we see, to a large extent, a fit of characters to their environment (e.g. Nordic people with pale skin, equatorial people with dark skin).

But this is not always so. The Inuit (Eskimos) have brown skin, yet live where there is not much sun. Presumably they have a genetic makeup such as $M_A M_A m_B m_B$ which would not be able to produce lighter skin. On the other hand, native South Americans living on the equator do not have black skin.

These examples confirm that natural selection does not create new information—if the genetic makeup of a group of people does not allow variation in colour toward the 'most fit', natural selection cannot create such variation.

Pygmies live in a hot area, but rarely experience strong sunshine in their dense jungle environment, yet they have dark skin. Pygmies may be a good example of another factor that has affected the racial history of man: discrimination. If a variation from the normal occurs (e.g. a very light person in a dark people), then historically it has been usual for that person to be regarded as abnormal and unacceptable. Thus, such a person would find it hard to get a marriage partner. In this way, groups have tended to 'purify' themselves.

Also, in some instances, interbreeding in a small group can highlight any commonly occurring unusual features that would previously have been swamped by continual intermarriage. There is a tribe in Africa whose members all have grossly deformed feet as a result of this inbreeding.

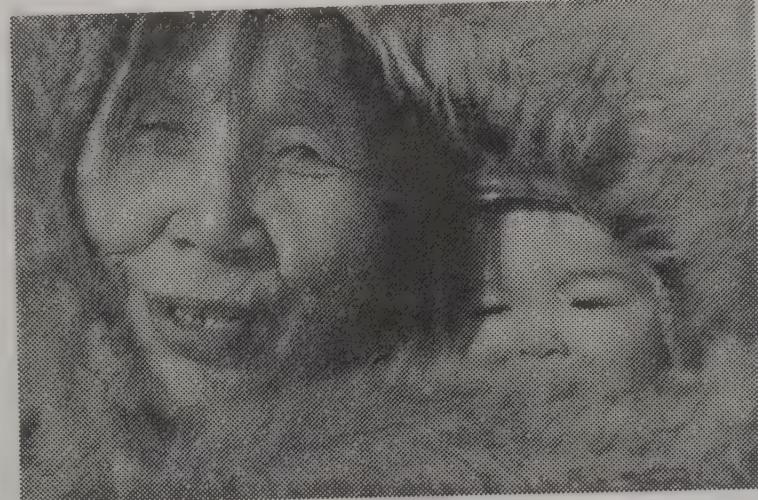
To return to pygmies, if people possessing genes for short stature were discriminated against, and a small group of them sought refuge in the deepest forest, their marrying only each other would ensure a pygmy 'race' from then on. The fact that pygmy tribes never have their own languages, but instead speak dialects of neighbouring non-pygmy tribal languages, is good evidence for this.

The effects of choice

People groups that were already equipped with certain characteristics may have made deliberate (or semi-deliberate) choices concerning the environments to which they migrated. For instance, people with genes for a thicker, more insulating layer of fat under their skin would tend to leave areas that were uncomfortably hot.

Other evidence

The evidence for the Bible's account of human origins is more than just biological and genetic. Since all peoples descended from Noah's family a



The Inuit people have brown skin but live at high latitudes.

Question 2—How did different 'races' arise?

relatively short time ago, we would be surprised if, in the stories and legends of many of the groups, there was not some memory, albeit distorted by time and retelling, of such a catastrophic event. In fact, an overwhelming number of cultures do have such an account of a world-destroying Flood. Often these have startling parallels to the true, original account (eight people saved in a boat, a rainbow, the sending of the birds and more).

Summing up

In summary, the dispersion at Babel, breaking a large interbreeding group into small, inbreeding groups, ensured that the resultant groups would have different mixes of genes for various physical features. In addition, the selection pressure of the environment would have suited the survival of certain combinations of genes—such as for dark skin colour in the tropics.

There has been no simple-to-complex evolution of any genes, for the genes were already present. The dominant features of the various people groups result from different combinations of previously existing created genes, plus some minor changes in the direction of degeneration, resulting from mutation (accidental changes which can be inherited). The originally created genetic information has been either sorted, reshuffled or has degenerated; it has not been added to.

Racism: a consequence of false beliefs about the origin of races

One of the biggest justifications for racial discrimination in modern times is the belief that, because people groups have allegedly evolved separately, they are at different stages of evolution, and some people groups are more backward than others. Thus, the other person may not be as fully human as you. This sort of thinking inspired Hitler in his quest to eliminate Jews and Gypsies, and



The Chinese character for 'ship', comprises three radicals; for vessel or container (left), eight (top), and mouths or people (bottom). Noah's Ark had eight people on board.¹¹

¹¹ Ancient Chinese writing shows that the early settlers in China had the same knowledge of God the Creator as recorded in Genesis. See Nelson, E.R., Broadbery, R.E. and Tong Chok, G., 1997. *God's Promise to the Chinese*, Read Books, Dunlap, TN, USA. Also available in Chinese.

to establish the 'master race'. Sadly, through evolutionary indoctrination, some Christians have been infected with the racist thinking that people of a different 'colour' are inferior because they are supposedly closer to the animals. Such attitudes are completely unbiblical (e.g. Acts 17:26, Colossians 3:11), although out-of-context Bible verses are often used in attempts to justify racist views (see Appendix I next page).

All tribes and nations are descendants of Noah's family!

The Bible makes it clear that any newly 'discovered' tribe is not a group of people who have never had any superior technology or knowledge of God in their culture. Rather, their culture (going back to Noah) began with (a) a knowledge of God, and (b) technology at least sufficient to build a boat of ocean-liner size. In looking for the reasons for this technological loss and cultural degeneration (see Appendix II next page), Romans chapter 1 suggests that rejection by their ancestors of the worship of the living God caused the degeneration.

Indeed, in trying to help impoverished tribal people, one of the biggest obstacles to improving their lot is animistic taboos. For example, one tribal group in the Philippines would not wash because they believed that evil spirits lived in the water. Disease was rife. Crops are seen to fail because the spirits have not been appeased, not because the farmer failed to control the weeds, pests and diseases. So, the first priority for these people should be to liberate them from such bondage through the Gospel. 'Education' and technology alone will not help them.

Most tribal people still have a memory, in their folklore and religion, of the fact that their ancestors turned away from the living God, the Creator. From then on they lived in fear of evil spirits.

Jesus Christ, God's reconciliation in the face of man's rejection of the Creator, is the only truth that



Animistic taboos cause serious health and social problems.

Question 2—How did different 'races' arise?

can set people of **every** culture, technology, people group or colour, truly free (John 8:32; 14:6).

Appendix I. Are 'black' people the result of a curse on Ham?

The above shows clearly that the dark skin of, for example, native Africans, is merely one particular combination of inherited factors. This means that these factors themselves, though not in that combination, were originally present in Adam and Eve. The belief that the skin colour of 'black' people is a result of a curse on Ham and his descendants is *nowhere taught in the Bible*. Furthermore, it was not **Ham** who was cursed, it was his son, **Canaan** (Genesis 9:18,25, 10:6), and Canaan's descendants were probably mid-brown skinned (Genesis 10:15–19). False teaching about Ham has been used to justify slavery and other non-biblical racist attitudes. It is traditionally believed that the African nations are largely Hamitic, because the Cushites (Cush was a son of Ham: Genesis 10:6) are thought to have lived where Ethiopia is today. Genesis suggests that the dispersion was probably along family lines, and it may be that Ham's descendants were on average darker than, say, Japheth's. However, it could just as easily have been the other way around.

Now Rahab, mentioned in the genealogy of Jesus in Matthew 1, was a Canaanite. This descendant of Ham must have married Salman, an Israelite (Matthew 1:5). Since this was a union approved by God, it shows that the particular 'race' she came from was not important. It mattered only that she trusted in the true God of Israel (Joshua 2:11). Ruth, a Moabitess, also features in the genealogy of Christ. She expressed faith in the true God before her marriage to Boaz (Ruth 1:16). The only marriages that God frowns upon are those of Christian with non-Christians (2 Corinthians 6:14).¹²

Appendix II. 'Stone Age' people?

Archaeology shows that there were once people who lived in caves and used simple stone tools. There are still people who do the same today. We have seen evidence that all people on earth descended from Noah and his family. Genesis indicates that before the Flood there was at least sufficient technology to make musical instruments, to farm, forge metal implements, build cities, and build a very large seaworthy vessel. After the dispersion at Babel, the hostilities induced by the new languages may have forced some groups to scatter rather rapidly, finding shelter where and when they could.

¹² Ham, K., 1999. *Creation* 21(3):22–25.

Answers to the 4 Big Questions

In some instances, the stone tools may simply have been a stage until their settlements were fully established, and they had found and exploited metal deposits, for example. In others, the original migrating group may not have taken all the knowledge with them. Ask an average family group today how many of them, if they had to start again, as it were, would know how to find, mine, and smelt metal-bearing rocks (ore bodies)? Obviously, there has been technological (cultural) degeneration/loss in many post-Babel groups.

In some cases, harsh environments may have contributed. The Australian Aborigines have a technology and cultural knowledge suited to their lifestyle and living in semi-desert areas.

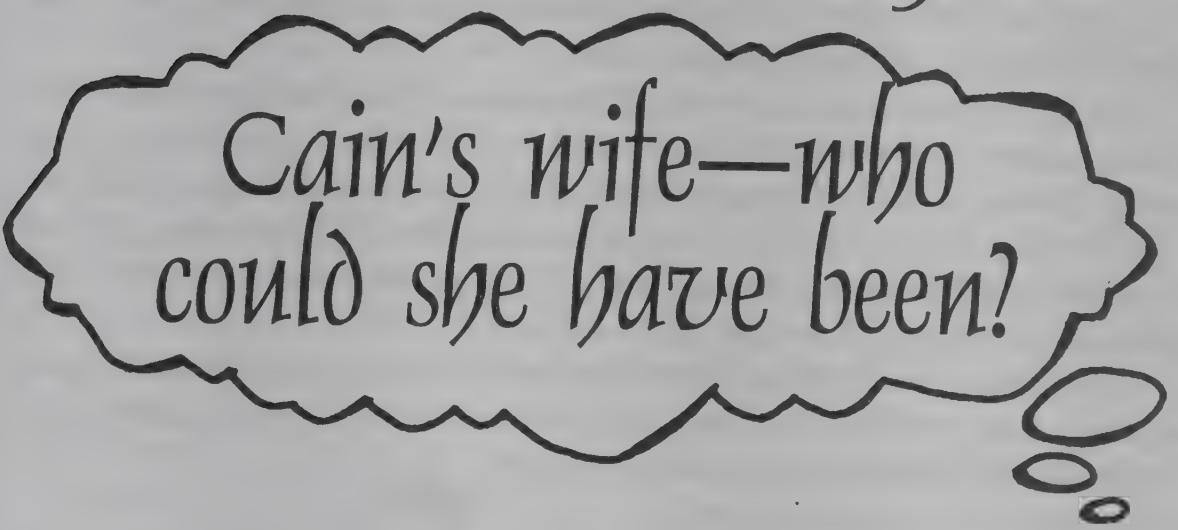
Sometimes we see evidence of degeneration that is hard to explain, but is real, nonetheless. For instance, when Europeans arrived in Tasmania, the Aborigines there had the simplest technology known. They caught no fish, and did not usually make and wear clothes. Yet recent archaeological discoveries suggest that earlier generations had more knowledge and equipment.

For instance, archaeologist Rhys Jones has found evidence that Tasmanian Aborigines once had equipment to sew skins into more complex clothes than the skins they just slung over their shoulders in the early 1800s. They were apparently also catching and eating fish in the past, but when Europeans arrived, they had not been doing this for a long time.^{13,14} From this we infer that technology can indeed be lost or abandoned, and is not always retained and built upon.

¹³ Jones, R., 1987. *Australian Geographic*, No. 8, (Oct.–Dec.), pp. 26–45.

¹⁴ Jones, R., 1977. The Tasmanian paradox. In: Wright, R.S.V. (ed.), *Stone Tools as Cultural Markers*.

QUESTION 3



Cain's wife—who could she have been?

Sceptics often use Cain's wife to try to discredit the Bible's record of history. They claim that, for Adam and Eve's son, Cain, to find a wife, there must have been other people on Earth who were not descendants of Adam and Eve. To many, this question is a stumbling block to accepting the Creation account of Genesis and its record of only one man and woman at the beginning of history—a record on which many Bible teachings depend.

The Bible clearly tells us that, at the beginning, God created one man and one woman.¹ God did not start by making a whole group of people. Adam was '*the first man*' (1 Corinthians 15:45). Eve '*was the mother of all living*'. (Genesis 3:20). Also, we are told that when Adam looked at the animals, he could not find a mate—there was no one of his kind.

So, we have all descended from Adam and Eve. And modern genetic studies are consistent with all people being the descendants of one woman.²

The Bible says *all* human beings are sinners, and we are *all* related (Acts

¹ Genesis chapters 1 and 2.

² So-called 'mitochondrial Eve'. See Loewe, L., and Scherer, S. 1997. *Trends in Ecology and Evolution* 12(11):422–423; Wieland, C., 1998. *CEN Technical Journal* 12(1):1–3.

17:26 — ‘And He has made all nations of men of one blood to dwell on all the face of the earth’). The Gospel (see pp. 59, 60) only makes sense on the basis that all humans alive and all who have ever lived are descendants of the first man, Adam.³

This means that Cain’s wife was a descendant of Adam. She could not have come from another ‘race’ of people.

Cain’s brothers and sisters

Cain was the first child of Adam and Eve recorded in Scripture (Genesis 4:1). He and his brothers, Abel and Seth (Genesis 4:2,25), were part of the first generation of children born on Earth.

Though not mentioned by name, Adam and Eve had a number of other sons and *daughters* (Genesis 5:4). It does not say when they were born, or how many. Considering their long lifespans, they could have had many children. The historian Josephus wrote, ‘The number of Adam’s children, as says the old tradition, was 33 sons and 23 daughters.’⁴ Many could have been born in the 130 years (Genesis 5:3) before Seth was born.

The Bible does not tell us when Cain married, or any of the details of other marriages and children, but some brothers had to marry their sisters at the beginning of human history, or there would not have been any more generations!

What about God’s Laws against brother-sister marriage?

The law forbidding such marriages was not given until the time of Moses (Leviticus 18–20). Provided marriage was one man for one woman for life (based on Genesis 1,2, cf. Matthew 19:3–6), originally there was no disobedience to God’s law when close relatives (even brothers and sisters) married.

Abraham married his half-sister



³ Eve, in a sense, was a ‘descendant’ of Adam in that she was made from his flesh and thus had some biological connection to him (Gen. 2:21–23).

⁴ Josephus, Flavius. (translated by William Whiston, A.M.) 1981. *The Complete Works of Josephus*, Kregel Publications, p. 27.

Question 3—Cain's wife—who could she have been?

(Genesis 20:12). God blessed this union to produce the Hebrew people through Isaac and Jacob. It was some 400 years later that God gave Moses laws that forbade such marriages.

Biological deformities?

Today, laws do not permit brothers and sisters (and half-brothers and half-sisters, etc.) to marry and have children because their offspring have a strong chance of being deformed.

It is easy to understand the basis for this. Each person inherits one set of genes from each parent, each parent having two sets of the genes.⁵ Unfortunately, genes today contain many mistakes (because of sin and the resulting Curse of death and decay), and these mistakes show up in a variety of ways. For example, genetic defects cause several thousand diseases. If one gene of a pair is OK, this usually covers the defect, but if both are defective, a disease, deformity or death often results.

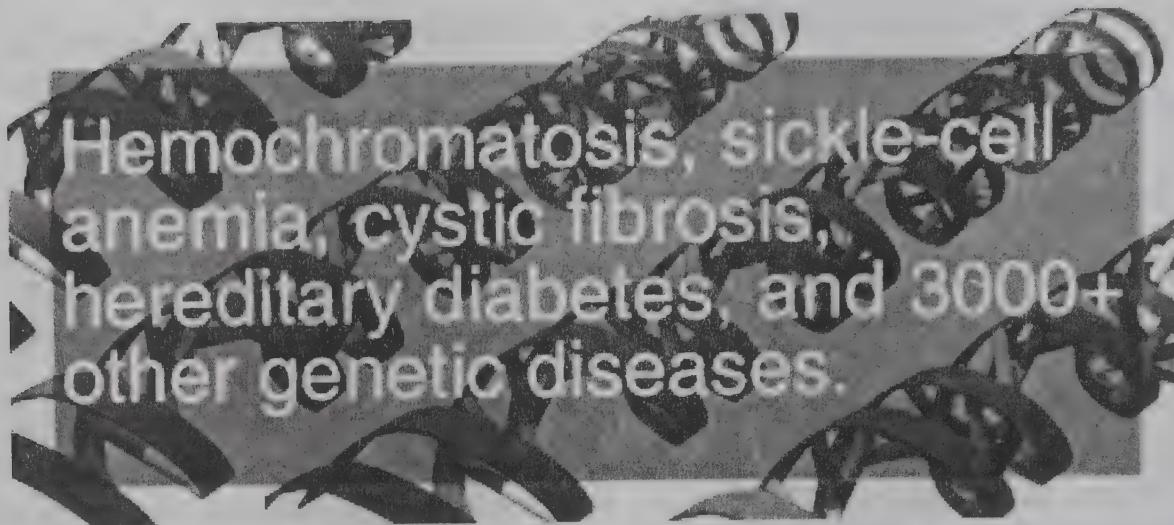
The more closely related two people are, the more likely it is that they will have similar mistakes in their genes, since these have been inherited from the same parents. Therefore, brother and sister are likely to have mistakes in the same genes. Offspring from them are likely to inherit at least some gene pairs where both genes are defective. This would result in deformities in the children.

Conversely, the further away the parents are in relationship to each other, the more likely it is that they will each have *different* mistakes in their genes. Here the children are likely to end up with pairs of genes with a maximum of one bad gene in each pair.

The human race is slowly degenerating as mistakes (mutations) accumulate generation after generation, and this points back to a time when there were no mistakes: Adam and Eve. When first created, they were perfect. Everything God made was '*very good*' (Genesis 1:31)—no mistakes! But when sin entered the world, the perfect creation began to degenerate, suffering the Curse of death and decay (Romans 8:22). Over thousands of years, this degeneration has resulted in all sorts of genetic mistakes in living things.

Cain was in the first generation of children ever born. He (and his brothers and sisters) may have received no defective genes from Adam or Eve, since the

⁵ Humans have about 100,000 gene pairs.



Mutations have accumulated since the Fall, causing many human diseases.

effects of sin and the Curse would have been minimal to start with (it takes time for copying errors to accumulate). In that situation, brother and sister could have married with God's approval, and without producing deformed offspring.

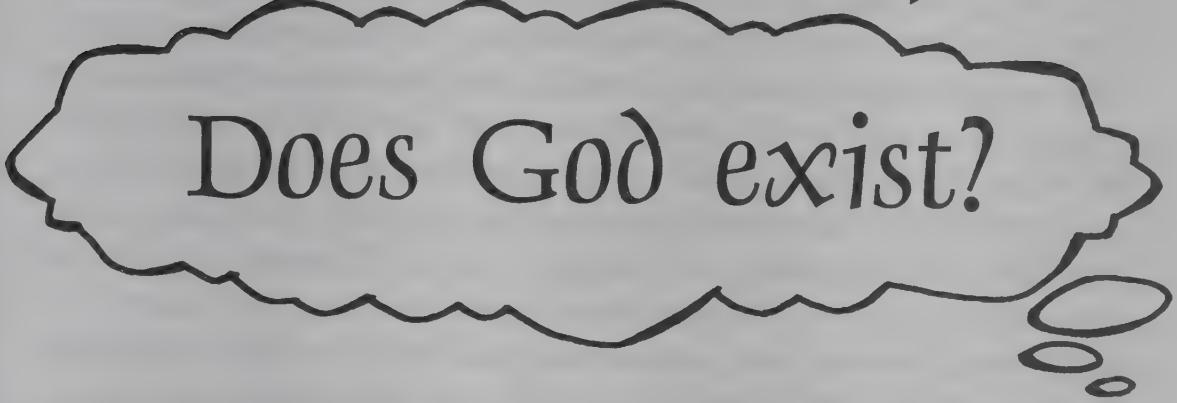
By the time of Moses (a few thousand years later), degenerative mistakes (mutations) would have increased to such an extent that God gave the laws forbidding brother-sister marriage (Leviticus 18–20).⁶ Also, there were plenty of people on the earth by now, and there was no need for close relations to marry.

CONCLUSION

The question of Cain's wife is easily answered when we start with the Bible, the record of the Creator who was there as history happened. It should not be an obstacle to someone believing the Bible.

⁶ Does this mean that God changed his mind by changing the laws? No, God did not change his mind; because of the changes that sin brought, He introduced new laws for our sake. Also, there is in the Bible a progressive revealing of God's plan, which was in His mind from eternity. See Grigg, R., 1998. *Creation* 20(3):22–24.

QUESTION 4



Does God exist?

Is there evidence that God exists? What are the consequences of atheism? Where did God come from? Can we know God personally?

The Bible begins with the statement: '*In the beginning God created the heavens and the earth*' (Genesis 1:1). God's existence is assumed, considered obvious or self-evident. Psalm 14:1 says, '*The fool has said in his heart, There is no God! They acted corruptly; they have done vile deeds, there is none who does good.*'

The Bible connects wrong thoughts about God—especially denying His existence—with corrupt morals. If there is no God, no Creator who sets the rules, then we are set adrift morally. When the children of Israel forgot that God was their Creator, Judge and King, '*every man did what was right in his own eyes*' (Judges 21:25) and chaos reigned.

We see this happening today. Countries where the people once honoured God experienced unprecedented security and prosperity. Those same countries today are crumbling as people turn their backs on God. Proverbs 14:34 says, '*Righteousness lifts up a nation, but sin is a shame to any people.*'

As nations turn away from God, living as if He does not exist, sin abounds—political corruption, lying, theft, slander, murder, drug-abuse, drunkenness, adultery, and all sorts of greed. Economic woes follow as taxes increase as

governments try to pay for bigger and bigger police forces, jails, and social security systems to patch up the problems.

A passage from the Bible, written 2,000 years ago, reads like a commentary on much of today's world (Romans 1):

¹⁸For the wrath of God is revealed from Heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness, ¹⁹because that which may be known of God is clearly revealed within them, for God revealed it to them. ²⁰For the unseen things of Him from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so they are without excuse. ²¹Because, knowing God, they did not glorify Him as God, neither were they thankful. But they became vain in their imaginations, and their foolish hearts were darkened. ²²Claiming to be wise, they became fools ²³and exchanged the glory of the incorruptible God for an image made like corruptible man, and birds, and four-footed animals, and creeping things. ²⁴Therefore God also gave them up to uncleanness through the lusts of their hearts, to dishonour their own bodies between themselves. ²⁵For they exchanged the truth of God for a lie and they worshipped and served the created thing more than the Creator, who is blessed forever. Amen. ²⁶Because of this, God gave them over to degrading lusts. For even their women exchanged the natural use for that which is against nature. ²⁷And likewise also the men, leaving the natural use of the woman, burned in their lust toward one another; males with males committing shameful acts, and receiving in themselves the penalty which was fitting for their error. ²⁸And even as they did not think fit to have God in their knowledge, God gave them over to a depraved mind, to do the things not right, ²⁹being filled with all unrighteousness, fornication, wickedness, greed, malice; being full of envy, murder, quarrels, deceit, evil habits, becoming gossips, ³⁰backbiters, haters of God, insolent, proud, braggarts, inventors of evil things, disobedient to parents, ³¹without discernment, covenant-breakers, without natural affection, unforgiving, unmerciful; ³²who, knowing the righteous order of God, that those practising such things are worthy of death, not only do them, but give hearty approval to those practising them.

Many of those in the highest positions in government and education in once-great nations the Bible would call 'fools'. They claim to be wise, but by denying the very existence of God, or His relevance to them today, they have become 'fools'.

Underpinning this abandonment of faith in God is the widespread acceptance

Question 4—Does God exist?

of evolutionary thinking—that everything made itself by natural processes; that God is not necessary. There is ‘design’, such people will admit, but no Designer is necessary. The designed thing designed itself! This thinking, where the plain-as-day evidence for God’s existence is explained away, leads naturally to atheism (belief in no God) and secular humanism (man can chart his own course without God). Such thinking abounds in the media, governments, schools and universities today.

Evolutionary thinking kills!

Some of the greatest evil seen has been perpetrated by those who have adopted an evolutionary approach to morality—Lenin, Hitler, Stalin, Mao Zedong, Pol Pot. Atheist Sir Arthur Keith acknowledged of Hitler:

‘The German Führer ... is an evolutionist; he has consciously sought to make the practice of Germany conform to the theory of evolution.’¹

Many millions have suffered terribly and lost their lives because of this atheistic way of thinking. Atheism kills, because without God there are no rules—anything goes! Atheists are at the forefront of efforts to legitimize euthanasia, abortion, drug-taking, prostitution, pornography and promiscuity. All these things cause misery, suffering and death. Atheism is the philosophy of death.

Now atheists love to point to atrocities committed by supposed ‘Christians’—the ‘Crusades’ is a favourite. However, if the people committing these terrible

deeds were indeed Christians, they were being inconsistent with their own standard of morality (e.g., ‘do not murder’, ‘love your enemies’). On the other hand, Stalin, for example, was being consistent with his morals, because, being an atheist (after reading Darwin), he had no objective basis for morality. Keith (above) admitted that Hitler was also consistent with his evolutionary philosophy.

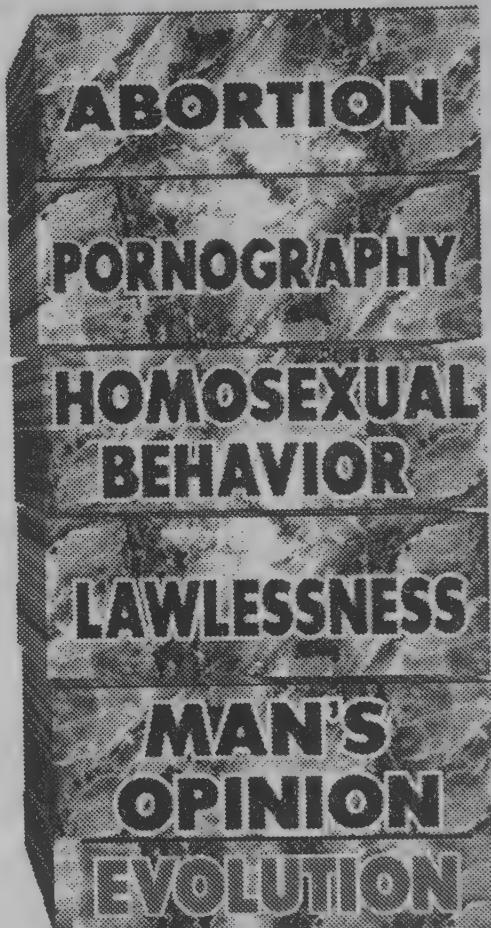
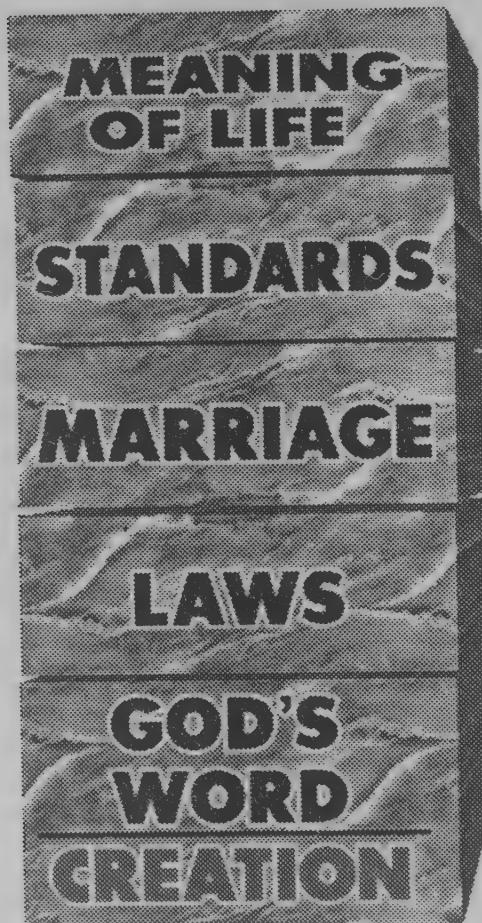
The Bible says ‘God is love’, ‘love one another’ and ‘love your enemies’. Such love is self-

¹ Keith, A., 1947. *Evolution and Ethics*, Putman, New York, p. 230.

sacrificing. Consequently, Christians have been at the forefront in helping the sick, looking after the orphaned and the aged, feeding the hungry, educating the poor, and opposing such things as child labour and slavery.

Atheism, with its evolutionary rationale, says 'love' is merely self-interest in increasing the chances of our genes surviving in our offspring or our close relatives. In the 'struggle for survival of the fittest', where is the basis for compassion? Hitler's death camps grew out of his desire for the 'Aryan race' to win the battle for 'the preservation of favoured races in the struggle for life'.²

However, not only is atheism destructive, it is logically flawed at its very roots because there must be a Creator, as we shall see.



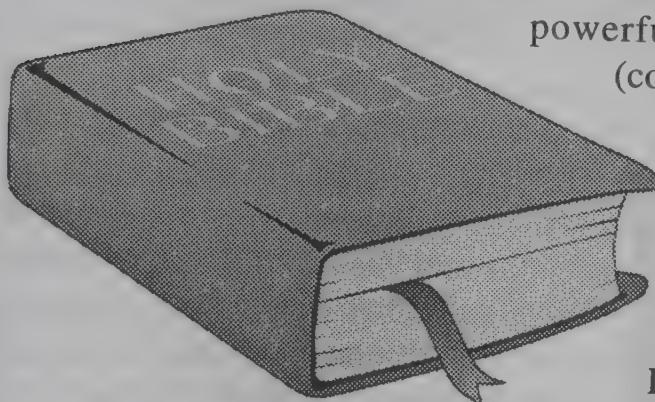
A Supreme Creator who gave Law provides a solid foundation for morality and meaning whereas evolution-made-everything provides no such basis.

² The subtitle of Darwin's *On the Origin of Species*.

Biblical evidence for Its divine authorship

The Bible, as well as proclaiming the existence of God, also bears witness that God exists, because only divine inspiration can explain this most remarkable of books. The characteristics that point to divine authorship are:³⁻⁵

The Bible's amazing unity. Despite being penned by more than 40 authors from over 19 different walks of life over some 1,600 years, the Bible is consistent from beginning to end. Indeed the first and last books of the Bible, Genesis and Revelation, dovetail so perfectly—telling of 'Paradise Lost' and 'Paradise Regained' respectively—that they speak powerfully of their divine authorship (compare for example Genesis 1-3 and Revelation 21-22).



The Bible's amazing preservation. In spite of political and religious persecution, the Bible remains. The Roman Emperor Diocletian, following an edict in

AD303, thought he had destroyed every

hated Bible. He erected a column over the ashes of a burnt Bible to celebrate his victory. Twenty-five years later, the new emperor, Constantine, commissioned the production of 50 Bibles (by hand) at the expense of the government! In the 18th century, Voltaire forecast that within a century there would be no Bibles left on Earth. Fifty years after he died, the Geneva Bible Society used his printing press and his house to produce Bibles! Today, the whole Bible is available in over 400 languages, far more than any other book.

The Bible's historical accuracy. Nelson Glueck, the famous archaeologist, spoke of what he called 'the almost incredibly accurate historical memory of the Bible'.⁶ William F. Albright, widely recognised as one of the great archaeologists, stated:

'The excessive scepticism shown toward the Bible by important historical

³ See Willmington, H.L., 1981. *Willmington's Guide to the Bible*, Tyndale House Publishers, pp. 810-824.

⁴ Geisler, N.L. and Nix, W.E., 1986. *A General Introduction to the Bible*, Moody Press.

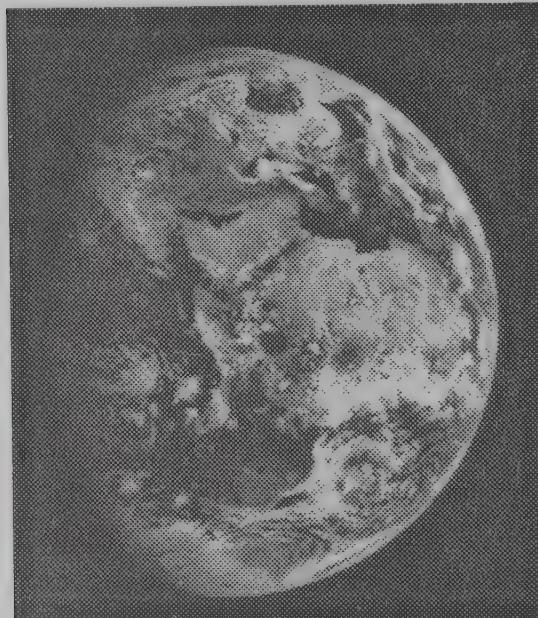
⁵ McDowell, J., 1972. *Evidence that Demands a Verdict*, Vol. 1, Campus Crusade for Christ.

⁶ Ref. 5, p. 68.

Answers to the 4 Big Questions

schools of the 18th and 19th centuries, certain phases of which still appear periodically, has been progressively discredited. Discovery after discovery has established the accuracy of innumerable details, and has brought increased recognition to the value of the Bible as a source of history.⁶

Sir William Ramsay, regarded as one of the greatest archaeologists ever, did not initially believe that the New Testament documents were historically reliable. However, his archaeological findings drove him to see that his scepticism was unwarranted. He had a profound change of attitude. Speaking of Luke (the writer of the *Gospel of Luke* and the *Acts of the Apostles*) Ramsay said, ‘Luke is a historian of the first rank ... he should be placed along with the greatest of historians.’⁷



The Bible recorded 4,000 years ago that Earth hangs in space without visible support.

At many specific points archaeology confirms the Bible’s accuracy.⁸ There are many particulars where sceptics have questioned the Bible’s accuracy, usually on the basis of there being no independent evidence (the fallacy of arguing from silence), only to find that further archaeological discoveries supported the Bible.⁵

The Bible’s scientific accuracy.

Some examples: that the earth is round (Isaiah 40:22); the earth is suspended in space without support (Job 26:7); the stars are countless⁹ (Genesis 15:5); the hydrologic cycle;¹⁰ sea currents;¹⁰ living things reproduce after their kind;¹¹ many insights into health, hygiene,¹² diet,¹³ physiology (such as the importance of

⁷ Cited in ref. 6, p. 73.

⁸ For comprehensive information on the Bible and archaeology, see <<http://www.answersingenesis.org/home/area/QA.asp>>

⁹ People of old thought that the stars could be counted—there were about 1200 visible stars. Ptolemy (AD 150) dogmatically stated that the number of stars was exactly 1,056. See Gitt, W., 1997. *Creation* 19(2):10–13.

¹⁰ Sarfati, J., 1997. *Creation* 20(1):44–46.

¹¹ Batten, D., 1996. *Creation* 18(2):20–23.

¹² Wise, D.A., 1995. *Creation* 17(1):46–49.

¹³ Emerson, P., 1996. *Creation* 18(2):10–13.

Question 4—Does God exist?

blood, e.g. Leviticus 17:11); the first and second laws of thermodynamics (e.g. Isaiah 51:6), and many other things.¹⁴

The Bible's prophetic accuracy. The Bible states that only God can accurately foretell events. God said:

I have foretold the former things from the beginning; ... I declared it to you from the beginning. Before it happened I revealed it to you; lest you should say, 'My idol has done them, and my graven image and my molten image have commanded them.' (Isaiah 48:3,5)

One will search in vain for detailed, accurate prophecies in other religious books, but the Bible contains many. McDowell⁵ documents 61 prophecies regarding Jesus alone. Many of these, such as His place, time, and manner of birth, betrayal, manner of death, burial, etc., were beyond His control. McDowell also thoroughly documents 12 detailed, specific prophecies regarding Tyre, Sidon, Samaria, Gaza and Ashkelon, Moab and Ammon, Petra and Edom, Thebes and Memphis, Nineveh, Babylon, Chorazin-Bethsaida-Capernaum, Jerusalem and Palestine. He shows that these prophecies were not written after the event. These things could not have all happened by chance. Only the wilfully ignorant (2 Peter 3:5) could deny this evidence that God must have inspired these prophecies.

The Bible's civilizing influence. The Bible's message transformed the blood-drinking barbarians of the British Isles. It is the basis of English common law, the constitutions of long-running stable democracies such as the United Kingdom, the United States, Canada, Australia and New Zealand. The Bible has inspired the noblest of literature—from Milton, Shakespeare, Coleridge, Scott and Pope, to name a few—and the art of such as Leonardo da Vinci, Rembrandt, Raphael and Michelangelo. The Bible has inspired the exquisite music of



The Gospel has transformed the lives of animistic people.

¹⁴ See Morris, H.M., 1984. *The Biblical Basis of Modern Science*. Baker Book House.



Bach, Handel, Haydn, Mendelssohn and Brahms. Indeed, the decline in acceptance of the biblical world-view in the West has been paralleled by a decline in the beauty of its art.¹⁵

Today the message of the Bible—the Good News of Jesus Christ—still transforms. Former cannibals now live in peace, and animistic tribal groups are today being delivered from fear and fighting, all because of the Bible.

The Bible's absolute honesty. Someone has said, 'The Bible is not a book that man could write if he would, or would write if he could.' The Bible does not honour man, but God. The people in the Bible have feet of clay; they are shown 'warts and all'. Against the backdrop of their sinfulness and unfaithfulness, God's holiness and faithfulness shine through.

Even the 'heroes of the faith' (Hebrews 11) have their failures recorded, including Noah (Genesis 9:20–24), Moses (Numbers 20:7–12), David (2 Samuel 11), Elijah (1 Kings 19), and Peter (Matthew 26:74). On the other hand, the enemies of God's people are often praised—for example, Artaxerxes (Nehemiah 2), Darius the Mede (Daniel 6), and Julius (Acts 27:1–3). These clearly show that the Bible was not written from a human perspective.

The Bible's life-transforming message. In San Francisco, a man once challenged Dr Harry Ironside to a debate on 'Agnosticism¹⁶ versus Christianity'. Dr Ironside agreed, on one condition: that the agnostic first provided evidence that agnosticism was worth defending. Dr Ironside challenged the agnostic to bring one man who had been a 'down-and-outer' (a drunkard, criminal, or such) and one woman who had been trapped in a degraded life (such as prostitution), where both of these people had been rescued from their lives of degradation through embracing agnosticism. Dr Ironside undertook to bring to the debate 100 such men and women who had been gloriously rescued through believing the Gospel that the agnostic ridiculed. The sceptic promptly withdrew his challenge to debate.

The message of the Bible mends lives broken by sin, sin which separates us from our holy Creator. In contrast, agnosticism and atheism, like all anti-God philosophies, destroy.

¹⁵ Schaeffer, F., 1968. *Escape from Reason*, Inter-Varsity Press.

¹⁶ Agnosticism denies the truth of God's Word by claiming that we cannot know if God exists. It is in practice little different from atheism.

Other evidence for the Creator-God of the Bible¹⁷

The universal tendency of things to run down, to fall apart, shows that the universe had to be ‘wound up’ at the beginning. It is not eternal. This is totally consistent with ‘*In the beginning God created the heaven and the earth*’ (Genesis 1:1).

The changes we see in living things are not the sorts of changes that suggest that the living things themselves came into being by some sort of natural, evolutionary, process. Evolution from molecules to man needs some way of creating complex new genetic programs, or information. Mutations and natural selection are only ever observed to cause loss of information.

The fossils do not show the anticipated multitude of transitional forms from one basic kind of organism to another. This is powerful evidence against the belief that living things made themselves over eons of time.

Because the origin of life is almost unimaginably improbable, materialists think that lots of time will help their cause. However, lots of time will not change the tendency of things to fall apart rather than come together—they will just fall apart more! Evidence that the universe is relatively ‘young’ further contradicts the belief that everything made itself over billions of years. For example, the erosion of the continents is such that they would have been eroded to sea level over 200 times in the supposed time they have been there.¹⁸

The traditions of hundreds of indigenous peoples from around the world—stories of a global Flood, for example—corroborate the Bible’s account of history, as does biological evidence for the closeness of all human ‘races’ (see Question 2 on the origin of ‘races’).

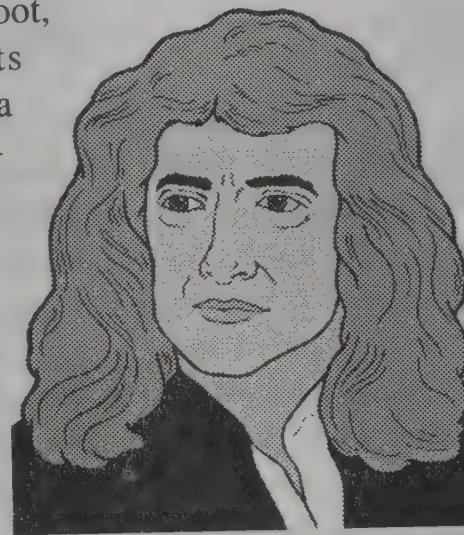
The explosion in knowledge of the intricate workings of cells and organs has shown that such things as the blood clotting system could not have arisen by a series of small accidental changes (mutations). The instructions, or information, for specifying the complex organisation of living things is not in the molecules themselves (as it is with a crystal), but is imposed from outside. This demands a Creator whose intelligence vastly exceeds ours (see Question 1 for more on why evolutionary attempts to explain our existence fail).

¹⁷ For more details on these issues, see Sarfati, J., 1999. *Refuting Evolution*. Answers in Genesis or Master Books (see p. 63 to order).

¹⁸ Walker, T., 2000. *Creation* 22(2):18–21.

The myth of atheism and science

Atheists encourage the common view that science has ‘disproven’ God by claiming that their way of thinking is ‘scientific’. In claiming this they merely re-define science to exclude God. In fact, science began to flourish only when the Bible’s view of creation took root, especially as the Reformation spread its influence. The way of thinking that enabled a scientific approach to investigating the world—that the created universe is real, consistent and understandable, for example—came from the Bible. Even non-Christian historians of science acknowledge this.¹⁹ Consequently, scientists who believed the Bible were involved in the development of almost every branch of science.^{20,21} Furthermore, there are many scientists today who believe that the Bible is a totally reliable account of origins and history.²²



The great scientist Isaac Newton believed the Bible

Is it science?

Science has given us many wonderful things: men on the moon, more food, computers, electricity, cures for diseases, and so on. All these achievements involve doing experiments in the present, making inferences from these results and doing more experiments to test those inferences of ideas. Here, the inferences, and conclusions, are closely related to the experiments and there is often little room for speculation. This type of science is ‘process’, or ‘operational’, science, and has led to many discoveries that benefit mankind.

However, the science that deals with the past is ‘historical’ science. Science is limited in reconstructing the past, because we cannot do experiments directly on past events, and history cannot be repeated. Here, observations made in the

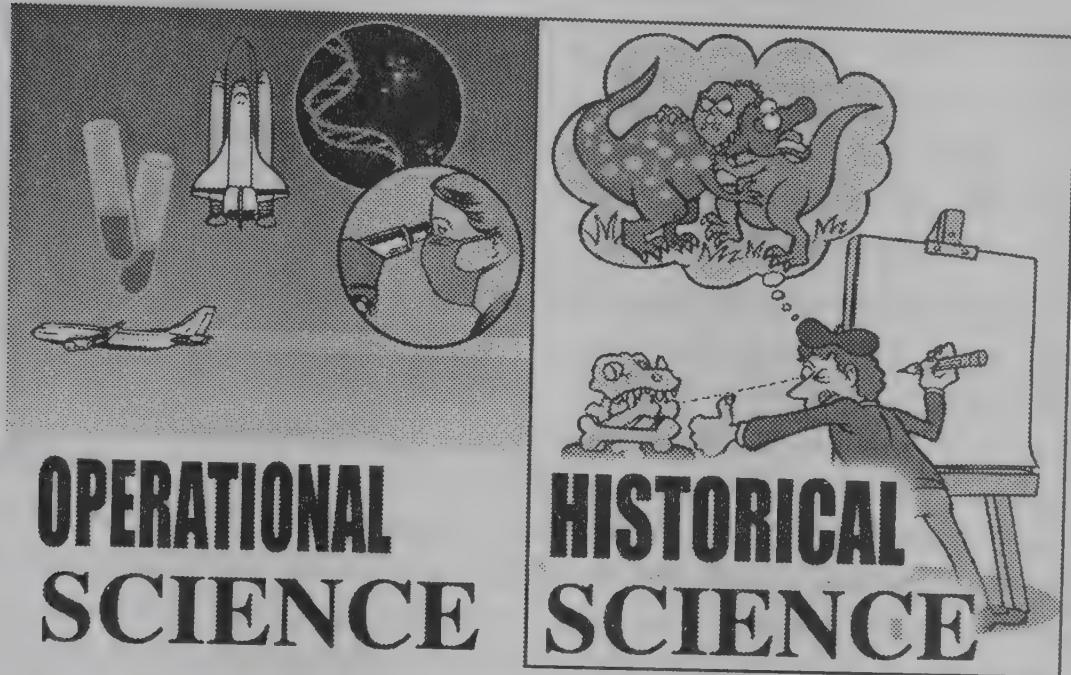
¹⁹ Eiseley, L., 1969. *Darwin’s Century: Evolution and the Man who Discovered it*. Doubleday, New York, p. 62.

²⁰ Morris, H.M., 1982. *Men of Science, Men of God*, Master Books.

²¹ Lamont, A., 1995. *21 Great Scientists Who Believed the Bible*, Answers Genesis, Brisbane, Australia.

²² Ashton, J., 1999. *In Six Days: Why 50 Scientists Choose to Believe in Creation*. New Holland Publishers, Sydney, Australia.

present are used to make inferences about the past. The experiments that can be done in the present that relate to the past are quite limited, so the inferences require a lot of guesswork. The further in the past the event being studied, the longer the chain of inferences involved, the more guesswork, and the more room there is for non-scientific factors to influence the conclusions—factors such as the religious persuasion of the scientist. So,



'Operational' science discovers how things operate. It involves repeated experiments. 'Historical science' tries to unravel the past with plausible stories—no experiments can be done on past events.

what may be presented as 'science' regarding the past may be little more than the scientist's own personal world-view.

The conflicts between 'science' and 'religion' occur with historical science, not operational science. Unfortunately, the respect earned by the success of operational science confuses many into thinking that the speculative claims of historical science carry the same authority. They don't.

With historical science, it is not the evidence in the present that is debated, so much as the inferences about the past. Scientists who believe the record of the Bible, which claims to be the Word of God,²³ will come to different conclusions from those who are atheists and ignore the Bible. Wilful denial of God's Word (2 Peter 3:3–7) lies at the root of disagreements over 'historical science'.

²³ Psalm 78:5, 2 Timothy 3:14–17, 2 Peter 1:19–21. God, who inspired the Bible, has always existed, is perfect and never lies (Titus 1:2). See also Psalm 119 to understand the importance of God's Word, the Bible.

Who created God?²⁴

Sceptics ask, 'If God created the universe, then who created God?' But God by *definition* is the *uncreated* Creator of the universe, so the question 'Who created God?' is illogical, just like 'To whom is the bachelor married?'

A more sophisticated questioner might ask, 'If the universe needs a cause, then why doesn't God need a cause? And if God doesn't need a cause, why should the universe need a cause?' Consider the following:

- Everything which has a **beginning** has a cause.²⁵
- The universe has a beginning.
- Therefore the universe has a cause.

Note the words in **bold type**. The universe requires a cause because it had a beginning. God, unlike the universe, had no beginning, so does not need a cause. Einstein's general relativity, which has much experimental support, shows that time is tied to matter and space. So time itself would have begun along with matter and space at the beginning of the universe. Since God is the creator of the whole universe, He is the creator of time. Therefore He is not limited by the time dimension He created, so He has no beginning in time. Therefore He does not have, or need to have, a cause.

In contrast, there is good evidence that the universe had a beginning. This can be shown from the *Laws of Thermodynamics*, the most fundamental laws of physics.

1st Law: The **total** amount of mass-energy in the universe is **constant**.

2nd Law: The amount of energy **available for work** is running down, or *entropy*²⁶ is increasing to a maximum.

If the total amount of mass-energy is limited, and the amount of usable energy is decreasing, then the universe cannot have existed forever, otherwise it would *already* have exhausted all usable energy and reached what is known as 'heat death'. For example, all radioactive atoms would have decayed, every part of the universe would be the same temperature, and no further work would be possible. So the universe must have been created with a lot of usable energy, and is now running down.²⁷

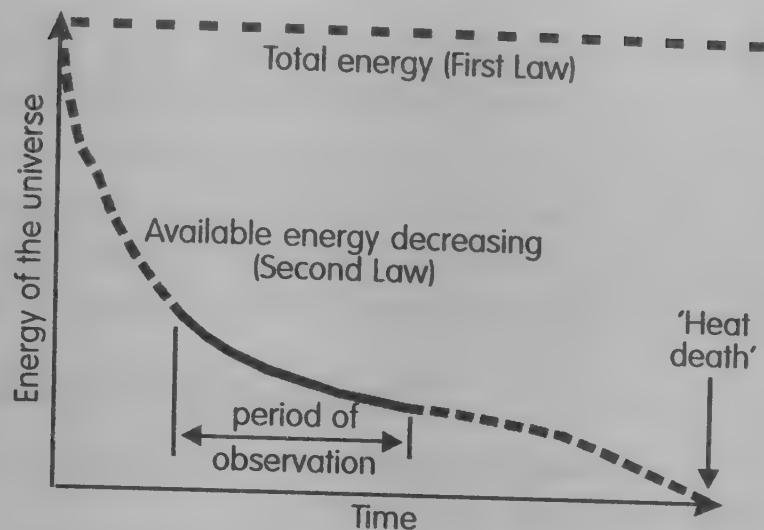
²⁴ This is based upon Sarfati, J., 1998. *CEN Technical J.* **12**(1):20–22.

²⁵ Actually, the word 'cause' has several different meanings in philosophy. But here the word refers to the *efficient cause*, the chief agent causing something to be made.

²⁶ Entropy is a measure of disorder, or of the decrease in usable energy.

²⁷ Oscillating (yo-yo) universe ideas were popularized by atheists like the late Carl Sagan and Isaac Asimov, solely to avoid the notion of a beginning, with its

Could the universe have had a beginning, but not need a cause? No. It is self-evident that things that begin have a cause—no one really denies it in their inner being. All science, history and law enforcement would collapse if this law of cause and effect were denied.²⁸ Also, the universe cannot be self-caused—nothing can create itself, because it would need to exist before it came into existence, a logical absurdity.



The amount of available energy in the universe is always decreasing, clear evidence that it had a beginning.

In summary

- The universe (including time itself) can be shown to have had a beginning.
- It is unreasonable to believe something could begin to exist without a cause.
- The universe therefore requires a cause, just as Genesis 1:1 and Romans 1:20 teach.

implications of a Creator. But the laws of thermodynamics undercut that argument, as each one of the hypothetical cycles would exhaust more and more usable energy. This means every cycle would be larger and longer than the previous one, so looking back in time there would be smaller and smaller cycles. So the multicycle model could have an infinite future, but can only have a finite past. Also, there is far too little mass to stop expansion and allow cycling in the first place, and no known mechanism would allow a bounce back after a hypothetical ‘big crunch’.

²⁸ Some physicists assert that quantum mechanics violates this cause/effect principle and can produce something from nothing, but this is not so. Theories that the universe is a quantum fluctuation must presuppose that there was *something* to fluctuate—their ‘quantum vacuum’ is a lot of matter-antimatter potential—not ‘nothing’. Also, if there is no cause, there is no explanation why *this particular universe* appeared at a *particular time*, nor why it was a universe and not, say, a banana or a cat which appeared. This universe can’t have any properties to explain its preferential coming into existence, because it would not have had *any* properties until it actually came into existence.

- God, as Creator of time, is outside of time. Therefore, He had no beginning in time, has always existed, and so does not need a cause.²⁹

Whichever way you look at it—the evidence from the Bible, the incredibly complex, organised information in living things, or the origin of the universe—belief in an all-powerful, all-knowing Creator God, as revealed in the Bible, not only makes sense, but is the only logical, viable and satisfying explanation.

The Christian knows God

To one who is a genuine Christian, there is no doubt about God's existence. The Bible says,

For as many as are led by the Spirit of God, they are the sons of God. For you have not received the spirit of bondage again to fear, but you have received the Spirit of adoption by which we cry, Abba, Father! The Spirit Himself bears witness with our spirit that we are the children of God. (Romans 8:14–16)

The Bible here says that Christians have a personal relationship with God—He is like a father to us. This is the testimony of those who have realized their sinfulness in the sight of Almighty God and the dire consequences of their sin. They have turned from their sin, and have accepted the forgiveness of God made possible through Jesus Christ's death and resurrection. All such genuine Christians have received the Holy Spirit of God and so have assurance that they are 'children of God'. We can indeed *know* that we have eternal life. (1 John 5:13).

²⁹ See Craig, W.L., 1984. *Apologetics: An Introduction*, Moody Press and *The Existence of God and the Beginning of the Universe*, at <<http://www.leaderu.com/truth/>>.

What now?

This book answers some of the most-asked questions about God, the meaning of life, and the Bible. You may now have realized that there must be a Creator who made us and that He has revealed important truths to us in the Bible—it is our Creator's message to us. As His creatures, He owns us and we are accountable to Him for how we live.¹ The Bible tells us that we all, like Adam and Eve (the first man and woman), have turned away from God's ways; we have gone our own way, living life in effect as if we were God. This, the Bible calls 'sin' and we have all sinned.²

The Bible tells us that, because of God's perfect purity He cannot allow sin to go unchecked, and He will hold us accountable for our sin. Like Adam, we all deserve God's judgment for our sin. As descendants of Adam, we all suffer physical death at the end of this earthly life. The Bible calls this death a curse and 'the last enemy'.³ Death had no place in the original perfect creation. It came about because of Adam's sin, when he, by his actions, told God that He was not needed—Adam was going to be his own god. However, each one of us has endorsed Adam's action, in personally rejecting God's rule over us.⁴

But God has provided a way of escape from the curse of death and the judgment to come. *'For God so loved the world that He gave his only begotten Son, that whoever believes in Him shall not perish, but have everlasting life.'*⁵ Jesus Christ came into the world to take upon Himself the curse and penalty for our sins. As God in the flesh,⁶ the God-man Jesus lived a sinless life⁷ and willingly gave Himself to suffer death for us, in our place.⁸ He took upon himself the punishment we deserved for our sins. As He was God (as well as man), His life was of sufficient value to pay for all the sins of all people. And he rose from the dead, proving that he had paid the price and conquered death.

Bible References: ¹ Romans 14:12, Hebrews 9:27

² Romans 3:23

³ Genesis 3:19, 1 Corinthians 15:26

⁴ Romans 5:12

⁵ John 3:16

⁶ Colossians 2:9

⁷ Hebrews 4:15

⁸ Romans 5:8, 1 Peter 3:18

Jesus' death and resurrection are attested facts of history—many have tried to explain away the events and been converted as they considered the evidence.

God offers this free gift of salvation to all who will receive it. He calls upon all to turn away from their sinful ways and trust in what Christ has done for us. We can do nothing to remove or make up for our guilt before God. Doing good things does not remove our sin, and since we are all sinners, we can do nothing to undo that; it is only by the mercy of God that we can be saved through what He has done—it is a gift.⁹

On the other hand, whoever spurns God's offer will suffer His wrath in the judgment to come, of which the Bible clearly warns. This is a terrifying prospect.¹⁰ Jesus spoke much of this, warning people of the danger they faced. The Bible's book of Revelation uses graphic imagery to depict the dreadful future of those who reject God's mercy now.

If God has shown you that you are an unworthy sinner, deserving of His condemnation, in need of His forgiveness, then the Bible says that you must have '*repentance toward God and faith toward our Lord Jesus Christ.*'¹¹ Repentance means a complete change of attitude—that you agree with God about your sin and about who Jesus is and what he did for you, and that you now want to live a life pleasing to Him. Faith in Jesus Christ entails accepting who He is, '*the Son of the living God*', that '*Christ died for the ungodly*' and that He conquered death for you in His resurrection.¹² You must believe that He is able to rescue you, and then put your trust in Christ alone to make you right with God.

If God has shown you your need and given you the desire to be saved, then turn to Christ now. Speak to Him, admitting that you are a guilty, helpless sinner, and ask Him to save you and be Lord of your life, helping you to leave behind your sinful ways and live for Him. The Bible says, '*if you confess with your mouth the Lord Jesus, and believe in your heart that God raised Him from the dead, you shall be saved.*'¹³ If you have spoken to God in this way, then you should find some Christians who respect the Bible, God's Word, as authoritative in all matters of which it speaks. Tell them what you have done and ask them to help you as you learn to live as God wants you to live.

⁹ Ephesians 2:8–9

¹⁰ 2 Thessalonians 1:8–9

¹¹ Acts 20:21

¹² 1 Corinthians 15:1–4, 21–22

¹³ Romans 10:9

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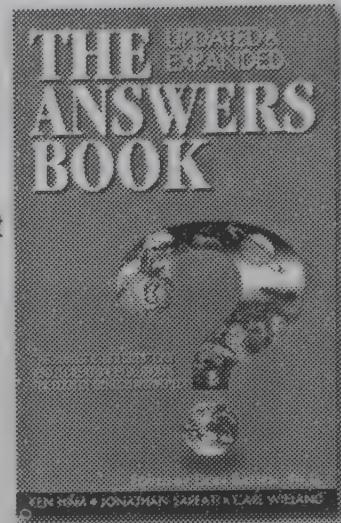
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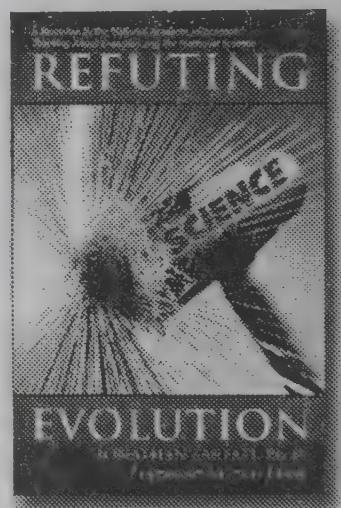
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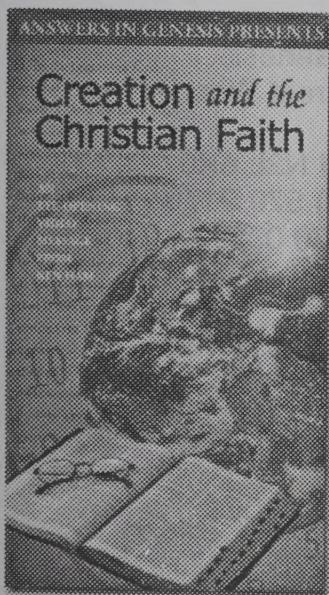
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